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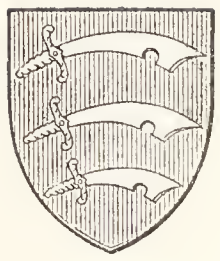

ADMINISTRATIVE COUNTY OF ESSEX

REPORT

OF THE

Medical Officer of Health

FOR THE YEAR

1956

GEORGE G. STEWART, M.R.C.S., L.R.C.P., D.P.H.
COUNTY MEDICAL OFFICER OF HEALTH

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HEALTH COMMITTEE

31st December, 1956

Established as required by the National Health Service Act, 1946—Chairman and Vice-Chairman of the Council and Alderman W. J. Bennett (Past Chairman of the Council) ex-officio, thirty-four other members of the Council and nineteen other persons.

Chairman—K. E. B. Glenny, O.B.E., J.P.

Vice-Chairman—Mrs. S. M. Bovill

Anfilogoff, Dr. N. L., F.R.I.C., F.Inst.Pet.
Ball, Mrs. M.
Bates, Mrs. E. M.
*Bennett, W. J., *C.B.E.*, J.P.
Berry, A. C.
Bredo, Mrs. M.
Brewster, Mrs. E. F. M.
Bridge, H. A., J.P.
Burrell, Mrs., A. M. M.
Chamberlin, Mrs. G. M.
*Chaplin, G. F., J.P.
Clark, Mrs. R.
Cullen, F.
Dell, Mrs. A. W.
Fallaize, Mrs. L., J.P.
Forster, Miss D. D.
*Foster, Sir Frank, *C.B.E.*, J.P.
Hills, H. J.
Hollis, Mrs. E. F. M.
Kingham, C. E.
Masters, F. R.
McEntee, The Lady, *O.B.E.*, J.P.
McNamara, W. E.
Milbourne, J. W.
Olsen, Mrs. E. M. Ström
Phillips, Dr. M. A.
Saywood, Mrs. E. C.
Thomas, Mrs. A. R.
Tilbury, G. S., J.P.
Turner, H. R.
Underwood, Mrs. P. R. C.
Wortley, F. A.
Young, Major A. M., *O.B.E.*, T.D., J.P.

* *Ex-officio Member*

Other Members
Appointed by the County Council

C. F. H. Green, 493 Aldborough Road, Ilford, Essex.
O. L. Oxley, Little Thurrock Hall, Little Thurrock, Essex.
The Dowager Lady Rayleigh, *O.B.E.*, Aldenham Park, Bridgnorth, Shropshire.

Nominated

H. E. Bates, *M.M.*, J. P., 40 Birch Avenue, Dovercourt, Essex.
Mrs. F. M. Cottee, J.P., 21 Castle Road, Rayleigh, Essex.
Lt.-Commander H. Denton, R.N. (Retd.), *O.B.E.*, "Roydene," Main Road, Dovercourt, Essex.
Mrs. B. E. Double, J.P., 8 St. John's Road, Chelmsford, Essex.
Mrs. J. H. Engwell, 138 Ripple Road, Barking, Essex.
Dr. J. C. Fox, 29 Hayes Road, Clacton-on-Sea, Essex.
H. A. Girt, "Torsdale," Hadleigh Road, Frinton-on-Sea, Essex.
G. Gray, Joyce House, Farm Hill, Waltham Abbey, Essex.
Mrs. J. Hammond, *O.B.E.*, J.P., 28 Dawlish Road, Leyton, London, E.10.

Mrs. L. A. Irons, J.P., 64 Lynton Avenue, Collier Row, Romford, Essex.
Mrs. W. M. Jiggens, 116 Bush Elms Road, Hornchurch, Essex.
Mrs. W. M. Palethorpe, 51 Farnborough Avenue, Walthamstow, London, E.17
Mrs. A. E. Prendergast, 53 Western Avenue, Dagenham, Essex.
Lt. Colonel C. L. Wilson, *O.B.E.*, *M.C.*, D.L., Red Cross House, 200 London Road, Chelmsford, Essex.

SUB-COMMITTEES

Designation.		Responsible to Health Committee for the functions set out in the
North-East Essex Mid-Essex South-East Essex South Essex Forest Romford Barking Dagenham Ilford Leyton Walthamstow	Health Area Sub-Committees	"Arrangements for Decentralisation on Local Health Authority Functions" relating to the day-to-day administration of the services provided under Sections 21, 22, 23, 24, 25, 26, 28 and 29 except those staff matters which are the function of the following Sub-Committees.
Mid-Essex South-East Essex South Essex Forest Romford Barking Dagenham Ilford Leyton Walthamstow	Staff Sub-Committees	Exercising in lieu of Health Area Sub-Committees functions relating to the appointment of staff in receipt of a salary of not exceeding £1,000 a year.
Mental Health Sub-Committee		The Mental Health Service (Sections 28 and 51).
Ambulance Sub-Committee		The Ambulance Service (Section 27).
Ambulance (Special Powers) Sub-Committee		The termination of the employment of operational staff of the Ambulance Service by dismissal or otherwise.
Ambulance (Standing) Sub-Committee		Appointment of staff and such other matters as may be delegated by the Ambulance Sub-Committee.
Training Homes Management Sub-Committee		The management of the Training Homes and Branch Homes (except Colchester and Walthamstow).
Funds Sub-Committee		The administration of moneys received from former County and District Nursing Associations.

Medical and Nursing Services Sub-Committee	The filling of vacancies arising in posts on the medical and nursing staff under the control of both the Health Committee and the Education Committee which are not the responsibility of some other Committee or Sub-Committee.
Finance Sub-Committee	Annual estimates, payment of accounts and expenditure generally.
General Purposes Sub-Committee	All functions not delegated to any other Sub-Committee, policy generally, and all public health, housing and public order functions.

STAFF OF HEALTH DEPARTMENT

31*st December*, 1956

1. CENTRAL OFFICE

County Medical Officer of Health :
GEORGE G. STEWART, M.R.C.S., L.R.C.P., D.P.H.

Deputy County Medical Officer of Health :
J. A. C. FRANKLIN, M.B., B.S., D.P.H.

Senior Medical Officers :
CHRISTINA GRANT, M.B., Ch.B., D.P.H. (Barrister-at-Law)
(*Preventive Medicine*)

R. C. GREENBERG, M.B., B.S., D.P.H.
(*Mental Health*)
(Commenced 22.8.56)

HILDA MENZIES, M.D., Ch.B., D.P.H.
(*Midwifery and Home Nursing*)

T. K. WHITMORE, M.R.C.S., L.R.C.P., D.C.H.
(*Child Health*)

Medical Officer for Certification Duties :
LILIAN BATES, M.D., (PARIS), D.P.H.

Chief Dental Officer :
J. BYROM, L.D.S.

County Health Visiting Adviser :
*MISS E. K. TRILLWOOD, S.R.N., S.C.M., Q.N., H.V. Cert.

Non-Medical Supervisor of Midwives :
* MISS E. SANDBACH, S.R.N., S.C.M., Q.N., H.V. Cert.

Day Nursery Supervisor :
*MISS D. V. E. NEALE, S.R.N., S.C.M.

Health Visitor Tutor :
MISS K. LYNCH, S.R.F.N., S.R.N., S.C.M., H.V. Tutor Cert.

County Domestic Help Organiser :
MISS G. H. JENKINS

County Health Inspector :
F. A. IRVING, B.Sc. (Est. Man.), D.P.A., (London), M.P.H.I.A.

* *Part-time Officer*

Assistants :
S. E. Willis, M.P.H.I.A.
W. J. Hodgkins, M.R.S.H.

Sampling Officer :
A. G. Chambers

County Ambulance Officer :
S. E. J. Hart, M.I.R.T.E., A.M.I.B.E.

Assistants :
R. C. G. Langford, F.I.C.A.P.
R. G. Jones
(Commenced 16.4.56)

Supervising Duly Authorised Officer and Petitioning Officer :
A. L. Barton

Assistant Supervising Duly Authorised Officer and Petitioning Officer :
K. M. Skingley

Health Education Organiser :
W. G. Penn

Senior Lay Administrative Assistant :
S. G. Clarke

Chief Clerk :
J. G. Cox

Administrative and Clerical Staff :
66 whole-time and 6 part-time

2. CENTRALLY ADMINISTERED SERVICES

Ambulance Service :

Station Officers	25
Assistant Station Officers	32
Head Drivers	3
Driver Attendants	463
Attendants	4
Controllers	2
Control Room Assistants	8
Clerk Telephonists	38

Mental Health Service :

Duly Authorised Officers	24
Occupation Centre Supervisors	11
Occupation Centre Assistant Supervisors	7
Occupation Centre Assistants	26
Occupation Centre Assistant Instructors	7
Mental Welfare Officer	1

Training Homes :

Superintendents	2
Other Nursing Staff	*91
Student District Nurses	12
Pupil Midwives (Part II)	17
Clerical and Administrative Staff	†5

**Includes* 19 *Part-time employees.* †*Includes* 1 *Part-time employee.*

3. AREA STAFFS

North-East Essex Health Area

MEDICAL OFFICERS

Area Medical Officer :

†John D. Kershaw, M.D., B.S., D.P.H.
(also Part time Medical Officer of Health, Borough of Colchester and Port Health Authority)

Assistant County Medical Officers :

Ann B. Clark, M.R.C.S., L.R.C.P.

†R. E. Barrett, M.B., B.S., M.R.C.S., L.R.C.P., D.T.M. & H., D.P.H.
(also Part-time Assistant Medical Officer, Borough of Colchester)
(Commenced 1.3.56)

†E. A. Hargreaves, M.R.C.S., L.R.C.P., D.P.H.
(also Part-time Medical Officer of Health, Urban Districts of West Mersea and Wivenhoe and Rural District of Lexden and Winstree)

†J. R. Hetherington, L.R.C.P. & S., L.R.F.P.S., D.P.H.
(also Part-time Medical Officer of Health, Borough of Harwich and Port Health Authority)

Sylvia I. E. Macmillan, M.B., B.S., D.P.H.

†R. D. Pearce, M.R.C.S., L.R.C.P., D.P.H.
(also Part-time Medical Officer of Health, Urban Districts of Brightlingsea, Clacton and Frinton and Walton and Rural District of Tendring)

†J. S. Ranson, M.R.C.S., L.R.C.P., D.P.H.
(also Part-time Medical Officer of Health, Urban and Rural Districts of Halstead)

Eleanor M. Singer, M.Sc., M.R.C.S., L.R.C.P., D.C.H.

In addition there are four Medical Officers undertaking six sessions a week on a sessional basis

DENTAL OFFICERS

†J. F. Godfrey, L.D.S.

A. Longden, L.D.S.
(Commenced 23.7.56)

†A. W. J. Larkin, Dentist
(Commenced part-time 16.1.56)

R. A. Tran, L.D.S.

In addition there are three Dental Officers undertaking 11 sessions a week on a sessional basis

ADMINISTRATIVE AND CLERICAL STAFF

20 Whole-time and 3 Part-time

† *Part-Time Officer*

Mid-Essex Health Area

MEDICAL OFFICERS

Area Medical Officer :

†J. L. Miller Wood, M.R.C.S., L.R.C.P., D.P.H.
(also Part-time Medical Officer of Health, Borough of Chelmsford)

Assistant County Medical Officers :

†T. D. Blott, B.Sc., M.B., B.S., D.P.H.
(also Part-time Medical Officer of Health, Borough of Maldon and Port Health Authority, Urban District of Burnham-on-Crouch, Rural Districts of Chelmsford and Maldon)

Joyce W. Brown, M.B., Ch.B., D.P.H.

Deidre R. Dooley, L.R.C.P. & S., D.C.H.

I. G. P. Fraser, M.B., Ch.B., D.P.H.
(Commenced 28.5.56)

†Irene M. Conway Hastilow, M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H., D.C.H., D.Obst., R.C.O.G.
(also Part-time Medical Officer of Health, Borough and Rural District of Saffron Walden)

Muriel Parkes, B.A., M.B., B.Ch., B.A.O.

†C. R. C. Rainsford, M.D., D.P.H., D.T.M.
(also Part-time Medical Officer of Health, Urban Districts of Braintree and Bocking, and Witham, Rural Districts of Braintree and Dunmow.

Annette Wyatt, M.D., B.S., M.R.C.S., L.R.C.P.

Margaret Turner, M.R.C.S., L.R.C.P.

DENTAL OFFICERS

B. G. Brown, L.D.S.

Mrs. N. S. Mezits, Dental Doctor, Latvia

†R. N. Robson, L.D.S., R.C.S.
(Commenced 1.10.56)

In addition there are three Dental Officers undertaking 15 sessions a week on a sessional basis

ADMINISTRATIVE AND CLERICAL STAFF

25 Whole-time and 5 Part-time

South-East Essex Health Area

MEDICAL OFFICERS

Area Medical Officer :

†W. J. Moffat, M.B., Ch.B., D.P.H.
(also Part-time Medical Officer of Health, Rural District of Rochford)

Assistant County Medical Officers :

Jean Buchanan, M.B., Ch.B.

J. C. T. Fiddes, M.B., Ch.B.

T. H. J. Hargreaves, M.R.C.S., L.R.C.P.

†N. S. R. Lorraine, M.D., Ch.B., D.P.H.
(also Part-time Medical Officer of Health, Urban Districts of Benfleet, Canvey Island and Rayleigh)

† *Part-time Officer*

†P. X. O'Dwyer, M.B., B.Ch., D.P.H.
(also Part-time Medical Officer of Health, Urban District of Basildon)
J. Reach, M.D. (Prague)
Jean Troughton, L.R.C.P. & S.

DENTAL OFFICERS

H. J. Cracknell, L.D.S.
H. Levison, B.D.S., L.D.S.
R. Maxwell, L.D.S.
†H. L. Thorn, L.D.S.
In addition there are four Dental Officers undertaking 11 sessions a week on a sessional basis :

ADMINISTRATIVE AND CLERICAL STAFF

16 Whole-time.

South Essex Health Area

MEDICAL OFFICERS

Area Medical Officer :

†W. T. G. Boul, M.B.E., M.D., D.P.H., F.Z.S.
(also Part-time Medical Officer of Health, Urban District of Thurrock)

Assistant County Medical Officers :

Ursula M. Anderson, M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H.
M. J. Catton, M.B., B.S.
(Commenced 20.2.56)
Elizabeth M. Hargreaves, M.B., Ch.B., D.P.H.
W. R. Howell, L.M.S.S.A.
(Commenced 3.12.56)
R. G. Newberry, M.B., B.S.
(Commenced 1.4.56)
Mary M. E. Rutter, M.R.C.S., L.R.C.P., M.B., B.S., D.C.H., M.D., D.P.H.
Aniela A. Szwede, M.B., Ch.B.
Doris E. C. Walker, M.B., B.S., L.R.C.P., M.R.C.S., D.A.
†S. R. Warren, M.B., Ch.B., D.P.H.
(also Part-time Medical Officer of Health, Urban District of Brentwood)
Mair E. Williams, M.R.C.S., L.R.C.P.

DENTAL OFFICERS

R. A. Collins, L.D.S.
Mrs. C. Grieshaber
Doctor Medicinal Dentium, Berlin University
Mrs. O. Saunders
Diploma of Dental Surgery, Latvia
In addition there are four Dental Officers undertaking 13 sessions a week on a sessional basis

ADMINISTRATIVE AND CLERICAL STAFF

25 Whole-time and 9 Part-time

† *Part-Time Officer*

Forest Health Area

MEDICAL OFFICERS

Area Medical Officer :

†F. G. Brown, T.D., M.B., B.Ch., B.A.O., D.P.H.
(also Part-time Medical Officer of Health, Borough of Wanstead and Woodford)

Assistant County Medical Officers :

†I. Ash, M.D. (Rome), D.P.H.
(Commenced 13.2.56)
(also Part-time Medical Officer of Health, Urban Districts of Epping and Harlow, Rural District of Epping and Ongar).

†J. H. Crosby, M.B., Ch.B., D.P.H.
(also Part-time Medical Officer of Health, Borough of Chingford)

Gisella Eisner, M.D. (Prague), D.C.H.

E. L. Ewan, M.B., Ch.B., B.Hy., D.P.H.

†H. Franks, M.B., B.S., B.Hy., D.P.H.
(also Part-time Medical Officer of Health, Urban Districts of Chigwell and Waltham Holy Cross)

Lily White, M.B., Ch.B.
(Commenced 3.4.56)

DENTAL OFFICERS

Mrs. L. E. Broadbent, L.D.S.

Mrs. E. Kimelman, M.D. (Vienna)

C. S. Neame, L.D.S.

In addition there are four Dental Officers undertaking 14 sessions a week on a sessional basis

ADMINISTRATIVE AND CLERICAL STAFF

19 Whole-time

Romford Health Area

MEDICAL OFFICERS

Area Medical Officer :

†James B. Samson, M.D., Ch.B., D.P.H.
(also Part-time Medical Officer of Health, Borough of Romford).

Assistant County Medical Officers :

J. J. Duffy, M.B., B.Ch., B.A.O., D.P.H.

Elizabeth M. Haga, M.B., B.S., L.R.C.P., M.R.C.S., D.P.H.

Sylvia R. Ingold, M.B., B.S., M.R.C.S., L.R.C.P., D.(Obst.), R.C.O.G.
(Commenced 16.1.56)

Naveen P. Bhandari, L.R.C.P., M.R.C.S., M.B., B.S., C.P.H.
(Commenced 15.10.56)

DENTAL OFFICERS

Miss M. L. Ell, L.D.S.

Mrs. D. Shirlaw, L.D.S.

In addition there are three Dental Officers undertaking seven sessions a week on a sessional basis

ADMINISTRATIVE AND CLERICAL STAFF

12 Whole-time and 1 Part-time

† *Part-time Officer*

Barking Health Area

MEDICAL OFFICERS

Area Medical Officer :

†F. Groarke, M.B., L.M., D.C.H., D.P.H.
(also Part-time Medical Officer of Health, Borough of Barking)

Assistant County Medical Officers :

†Margaret I. Adamson, M.B., Ch.B., D.P.H.
(also Part-time Deputy Medical Officer of Health, Borough of Barking)

Eileen E. Martin, M.B., Ch.B.

Eugenia Popper, M.D. (Vienna)

A. E. Seligmann, M.D., (Leipzig), D.T.M. & H.

Violet Spiller, M.D. (Geneva), M.R.C.S., L.R.C.P., D.P.H.

Mary H. Westlake, M.B., Ch.B., D.P.H.

DENTAL OFFICERS

J. Buntin, L.D.S.

A. R. Levy, L.D.S.

In addition there are two Dental Officers undertaking seven sessions a week on a sessional basis

ADMINISTRATIVE AND CLERICAL STAFF

19 Whole-time and 2 Part-time

Dagenham Health Area

MEDICAL OFFICERS

Area Medical Officer :

†J. Adrian Gillet, M.B., Ch.B., D.P.H.
(also Part-time Medical Officer of Health, Borough of Dagenham)

Assistant County Medical Officers :

Catherine Fitzpatrick, M.B., B.Ch.

Fannie Hirst, M.B., Ch.B., D.P.H.

E. P. James, M.R.C.S., L.R.C.P., L.M.S.S.A., D.(Obst.), R.C.O.G.
(Commenced 2.1.56)

Wilhelmina C. Maguire, L.M., L.R.C.P., L.R.C.S.I.

†Helen E. Mair, M.B., Ch.B., D.P.H.
(also Part-time Deputy Medical Officer of Health, Borough of Dagenham)
(Commenced 16.1.56)

Madeline Weizmann, M.R.C.S., L.R.C.P.

In addition there is one Medical Officer undertaking one session each week on a sessional basis

DENTAL OFFICERS

There are three Dental Officers undertaking eight sessions a week on a sessional basis

ADMINISTRATIVE AND CLERICAL STAFF

13 Whole-time

† *Part-Time Officer*

Ilford Health Area

MEDICAL OFFICERS

Area Medical Officer :

†I. Gordon, M.D., Ch.B., M.R.C.P., D.P.H.
(also Part-time Medical Officer of Health, Borough of Ilford)

Assistant County Medical Officers :

Annie Collins, M.B., B.Ch., B.A.O.

Frances E. O'Connor Wilson, B.A., M.B., B.Ch., B.A.O., D.P.H., L.M.

Helen B. Grange, M.B., B.S.

†Desiree M. B. Gross, M.D., Ch.B., M.M.S.A., D.P.H.
(also Part-time Deputy Medical Officer of Health, Borough of Ilford)

†Joan M. Pooley, M.B., B.S., D.C.H.

R. M. Noordin, M.R.C.S., L.R.C.P.

DENTAL OFFICERS

Senior Dental Officer :

E. V. Haigh, L.D.S.

In addition there are nine Dental Officers undertaking 26 sessions a week on a sessional basis

ADMINISTRATIVE AND CLERICAL STAFF

29 Whole-time and 2 Part-time

Leyton Health Area

MEDICAL OFFICERS

Area Medical Officer :

†M. Watkins, M.R.C.S., L.R.C.P., D.P.H.
(also Part-time Medical Officer of Health, Borough of Leyton)

Assistant County Medical Officers :

Ethel R. Emslie, M.D., Ch.B., D.P.H., D.C.H.

†Mary L. Gilchrist, M.D., Ch.B., D.P.H.
(also Part-time Deputy Medical Officer of Health, Borough of Leyton)

T. Mackinnell-Childs, B.A., M.B., B.Ch., M.R.C.S., L.R.C.P., D.P.H.
(Commenced 1.8.56)

Elsie L. Peet, M.D., M.B., L.D.S.

In addition there is one Medical Officer undertaking one session a week on a sessional basis

DENTAL OFFICERS

Senior Dental Officer :

A. E. Hall, L.D.S.

In addition there are eight Dental Officers undertaking 25 sessions a week on a sessional basis

ADMINISTRATIVE AND CLERICAL STAFF

12 Whole-time and 3 Part-time

† *Part-Time Officer*

Walthamstow Health Area

MEDICAL OFFICERS

Area Medical Officer :

†A. T. W. Powell, M.C., M.B., B.S., D.P.H.
(also Part-time Medical Officer of Health, Borough of Walthamstow)

Assistant County Medical Officers :

Carmel P. Dooley, L.R.C.P. & S., D.P.H.
(Commenced 1.6.56)

†Margaret Edwards, M.B., B.Ch., C.P.H.
(Commenced 23.4.56)

†Joycelyn H. Newman, M.B., Ch.B., D.Obst. R.C.O.G., D.P.H.

†Geoffrey Poole, M.B., B.S., D.Obst.R.C.O.G., D.P.H.
(also Part-time Deputy Medical Officer of Health, Borough of Walthamstow)

Josephine P. Werren, M.B., B.S., D.Obst. R.C.O.G., D.C.H.
(Commenced 3.4.56)

DENTAL OFFICERS

Senior Dental Officer :

L. W. Elmer, L.D.S.
(Retired 31.12.56)

Dental Officers :

Miss D. Anklesaria, L.D.S.
R. E. Hyman, L.D.S.
P. Pearce, B.D.S.
G. P. L. Taylor, L.D.S.
J. Timmis, L.D.S.

In addition there is one Dental Officer undertaking three sessions a week on a sessional basis

ADMINISTRATIVE AND CLERICAL STAFF

20 Whole-time and 4 Part-time

† *Part-Time Officer*

Health Visitors, Midwives, Medical Auxiliaries, etc.:

	Whole-time	Part-time
Superintendent Health Visitors	9	2
Non-Medical Supervisors of Midwives and Superintendents of Home Nurses	6	1
Domestic Help Organisers	17	—
Health Visitors, Tuberculosis Visitors and School Nurses	220	38
Clinic Nurses	16	31
Midwives	61	2
Home Nurse Midwives	191	13
Home Nurses	58	27
Chiropodists	20	6
Dental Technicians	7	—
Dental Attendants	40	17
Speech Therapists	15	10
Day Nursery Matrons	20	—
Day Nursery Deputy Matrons	17	—
Day Nursery Wardens	18	—
Day Nursery Nurses and Nursery Assistants	99	—
Day Nursery Students in Training	90	—
Domestic Helps	36	2,247
Psychiatric Social Workers	7	2
Oral (Dental) Hygienists	1	—
Occupational Therapists	2	—
Clinic Clerks	47	20

PREFACE

County Hall,
Chelmsford,
August, 1957.

To the Chairman and Members of the Health Committee.

Sir, My Ladies, Ladies and Gentlemen,

I have the honour to present my Annual Report as your County Medical Officer for the year 1956. This report has been prepared in the same manner as that for 1955 and I should like to draw attention to the following comments on noteworthy features.

Population

The population of the Administrative County continued to increase during 1956 although not to such a marked extent as in the previous two years. The increase was most marked in the new towns of Basildon and Harlow, but substantial increases were also evident in the south of the County due to housing development. On the other hand some old established centres of population such as Ilford, Leyton and Walthamstow showed decreases of more than 1,000. This shift of population from crowded areas on the fringe of London to new accommodation further within the County is, in my view, eminently desirable from the point of view of the health and well being of the people concerned.

Vital Statistics

The infant mortality rate recorded for 1956 was 20.3 per 1,000 live births, the lowest ever recorded in this County, and is evidence of the satisfactory state of the Council's Maternal and Child Welfare Services, although the continued high mortality rate for illegitimate infants gives no cause for complacency. The increasing number of premature births recorded over the last seven years emphasises the need for still further investigation into the causes and means of prevention of prematurity, giving rise, as it does, to a very substantial number of still births and infant deaths.

The total number of deaths in the Administrative County during 1956 was 18,022, a slight increase over the figure for 1955, but still comparing favourably with that for England and Wales.

Attention must be drawn to the steady increase in the number of deaths due to coronary disease and cancer of the lung ; it is a debatable point whether or not these increases are an indictment of the social conditions obtaining in the world today. Considerable time and money is being spent on research into the connection between cigarette smoking and lung cancer.

It is gratifying to see the great reduction in the number of deaths from tuberculosis—now less than one-third of those in 1950.

Staff Refresher Courses

Post graduate and post certificate instruction as detailed in the report included an experimental weekend course arranged for Assistant County Medical Officers on the staff, which deserves special mention. The course was well attended and successful and formed a very useful supplement to those arranged at national level.

Health Centres

From the reports in the year's working of the Health Centres at Harold Hill and Aveley it is pleasing to note that co-operation between the two branches of the Health Service, which it was hoped would stem from the creation of these still experimental buildings, has been most satisfactory, and there is little doubt as to the need for such centres in areas of new housing development. The fact that it has not yet been possible to erect a health centre pari passu with the houses is without doubt a considerable drawback.

Refuse Disposal

The fact that there exist within the Administrative County very extensive arrangements for dealing with a vast amount of refuse from London Boroughs is well known. The supervision of these dumps in accordance with the provisions of the Essex County Council Act 1933, forms no small part of the duties of the County Health Inspectorate. The standard of efficiency and hygiene at the dumps was maintained at a high level during the year and an article on the subject by an Assistant County Health Inspector is included as an Appendix to the Report.

Dental Services

In his Report, the Chief Dental Officer, refers to the Dentists Act which became operative on 4th July, 1956. It is to be hoped that the experiment of training a further class of dental ancillary workers will be successful, and will in due course alleviate the chronic shortage of dental staff, which is rendering the provision of an adequate service in the County an impossibility.

Poliomyelitis

After prolonged trials, a vaccine against poliomyelitis was made available to Local Health Authorities for certain specified groups of children during 1956. Some 200,000 children were eligible for vaccination in the County and acceptances were received in respect to 73,666. By the end of June, 6,880 children had been vaccinated. It is too early to comment on the effects of the vaccinations.

Dr. H. J. Griffiths

In March, 1956, Dr. H. J. Griffiths died suddenly. He was appointed as Senior Medical Officer for Mental Health on the Staff of the Department in

September, 1954 and in the eighteen months he was working in the Department, became known to all for his friendliness and charm of manner. His great interest in his work, together with his considerable clinical acumen and his facility for "getting on" with his patients, both adults and children, made him most suited to the type of work in which he was engaged.

Conclusion

My grateful thanks are due to the Chairman and Members of the Committee for the help and support which I have received during the year and I am also grateful to all the staff of the Department for their continued loyal assistance.

I have the honour to be,

Your obedient servant.

Geo. G. Stewart

County Medical Officer of Health.

SECTION I — STATISTICAL

ACREAGE AND POPULATION

During the year 1956 the area of the Administrative County remained at 959,463 acres or about 1,500 square miles. There were no boundary changes of County districts or Health Areas. However, the fact that Epping and Ongar Rural District, recently amalgamated, is partly in Mid-Essex and partly in the Forest Health Area presented a statistical problem. Apart from total population and migration figures there was no satisfactory way of apportioning statistics between the two Areas. Figures for these Areas, therefore, in all other matters exclude Epping and Ongar Rural District, details of which are given separately.

Population Changes

The estimated mid-year population of the County was 1,727,800, an increase of 23,600 over 1955 compared with increases of 31,700 and 28,400 in the two previous years. The natural increase of population was 7,646 leaving a balance of inward over outward migration of 16,000 as against inward movements of 24,000 and 20,000 in the two previous years. Of this 16,000 nearly 9,000 is attributable to the new towns of Basildon and Harlow and almost all the rest to the housing developments in Hornchurch, Brentwood, Benfleet and Rayleigh. All these districts, with the exception of Harlow, are in the south of the County. Large outward movements occurred in Ilford and Walthamstow and also in Colchester.

The net changes in population followed these movements, thus Basildon and Harlow increased by more than 5,000 each whilst Ilford, Walthamstow and Colchester dropped by more than 1,000. Leyton in addition dropped by more then 1,000 but this included a natural decrease of over 100. Romford increased by more than 2,000 but this included a natural increase of over 1,000. Districts with the largest natural increases were Romford, Thurrock and Harlow ; and with the largest natural decreases—Clacton and Leyton.

Between Health Areas there were considerable differences, South East Essex increasing by over 10,000 and Forest by 7,000 whilst North East Essex, Barking, Dagenham, Ilford, Leyton and Walthamstow showed net losses. The movement in population seems to be converging on South East Essex, South Essex and the Forest Health Areas. The following table shows the population in recent years of the eleven Health Areas:—

Health Area	1948	1952	1953	1954	1955	1956
North East Essex	173,446	184,179	185,971	187,850	191,130	190,200
Mid Essex	202,420	208,576	212,752	214,720	217,470	220,590
South East Essex	100,060	104,495	107,459	111,910	120,600	130,870
South Essex	204,730	222,520	229,650	238,850	249,840	256,030
Forest	175,037	204,730	209,568	216,590	224,270	231,150
Romford	72,610	99,360	104,100	105,900	107,800	110,100
Barking	78,890	77,140	78,800	76,580	75,990	75,560
Dagenham	111,500	113,200	114,000	115,300	115,600	115,100
Ilford	183,400	182,200	181,200	182,700	181,700	180,600
Leyton	106,100	104,200	103,200	103,100	102,000	100,900
Walthamstow	122,700	120,400	119,400	119,000	117,800	116,700

Barking, Ilford, Leyton and Walthamstow have been steadily dropping. North East Essex and Dagenham have risen slowly of late and now seem at a standstill, whilst the other Health Areas have risen considerably, especially South Essex and Forest which have increased by over 50,000 each in eight years. Whereas in 1948 the difference in population between the largest and smallest area was 132,000 it is now 181,000.

VITAL STATISTICS

Table I on page 118 gives detailed figures of population and the principal vital statistics for all county districts and for the eleven Health Areas into which the County is divided for the day to day administration of most of the functions of the County Council as local health authority.

Births

The number of live births registered during the year was 25,668 (24,290 in 1955) giving a birth rate of 14.8 per thousand population compared with 14.3 and 14.5 in the two previous years. When adjusted for comparison purposes this becomes 14.3 compared with 15.6 for England and Wales. South East Essex (18.2), South Essex and Romford Health Areas have the highest rates whilst Ilford, Leyton and Walthamstow in Metropolitan Essex continue to have the lowest. Harlow clearly has the highest rate among districts (32.9) and in fact possesses the highest birth rate in England and Wales.

The number of still births registered during the year was 507 (538 in 1955) giving a still birth rate of 19.4 per thousand total births. This is the second lowest figure in the history of the County, reversing the upward trend from 1949 to 1954 as is shown by the following table of yearly still birth rates.

1949	1950	1951	1952	1953	1954	1955	1956
19.3	20.3	21.5	21.6	20.8	22.7	21.7	19.4

The rate for England and Wales is 23.0. Within the County there are many Health Areas with rates far above the County rate or even that for England and Wales. Romford (25.1), Barking, Dagenham and Leyton show the highest rates, whilst South Essex (17.0), South East Essex and Walthamstow have the lowest. Although the County rate fell considerably in 1956 certain Health Areas showed a rise, noticeably Ilford (increase of 7.7%) Romford and Forest. Health Areas showing a fall of more than 5% were North East Essex, South Essex and, despite its high rate, Barking.

Illegitimate births numbered 994, of which 28 were still born, giving a still birth rate of 28.2 compared with 19.0 for legitimate births. The illegitimate still birth rate has not fallen since last year and the total number of illegitimate births has risen by over 100. The percentage of births registered as illegitimate was 3.8 compared with 3.6 and 3.8 in the two previous years.

Infant Mortality

There were 522 deaths under the age of one year, giving an infant mortality rate of 20.3 per 1,000 live births compared with 22.1 and 21.1 in the two previous years. This is the lowest rate ever recorded in the County. However, the infant mortality rate for illegitimate infants was 33.1 compared with 19.8 for legitimate infants. The illegitimate rate has remained at a high figure well above the legitimate rate as the following table shows:—

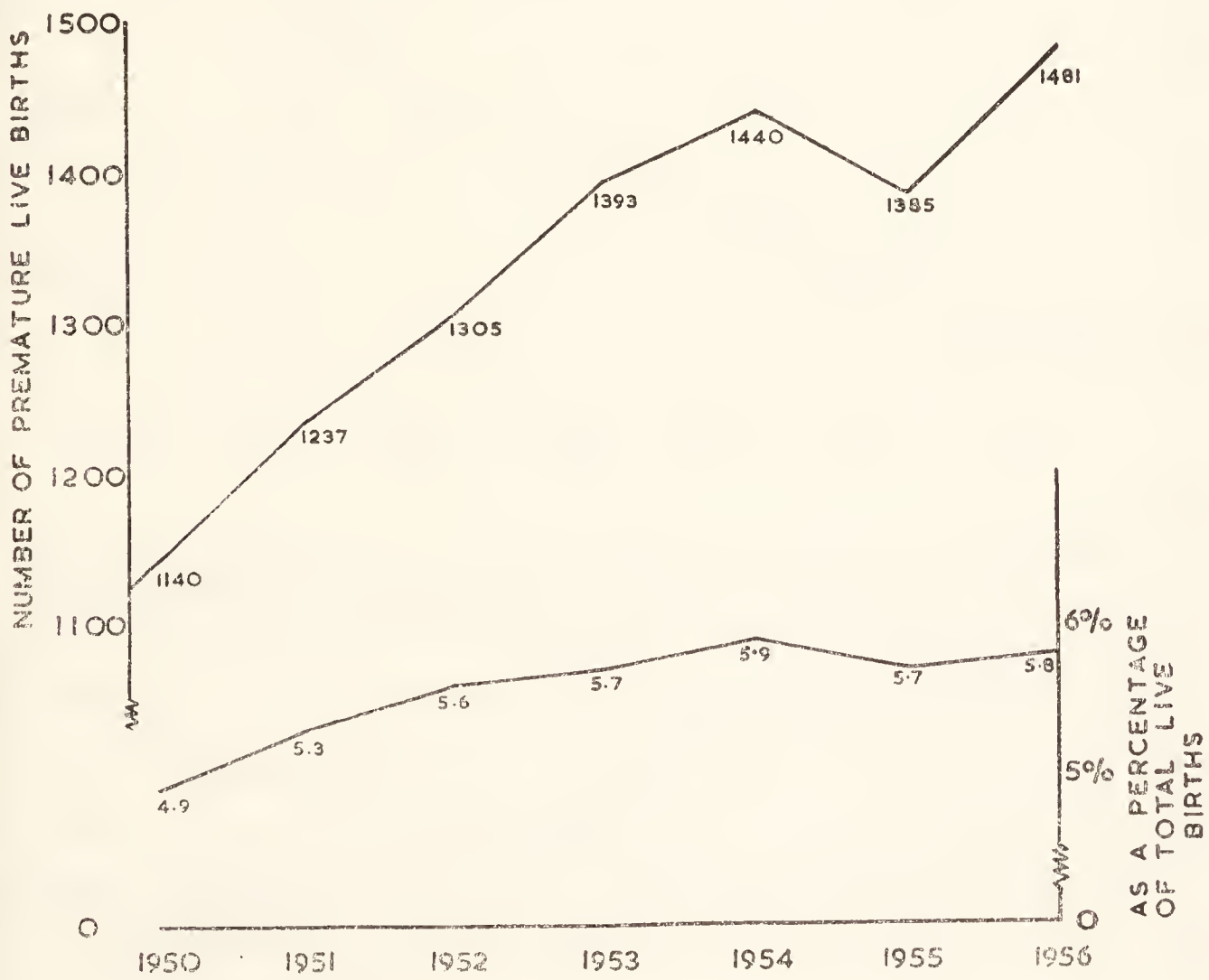
1951	1952	1953	1954	1955	1956
31.8	28.7	37.0	37.6	31.0	33.1

Unfortunately there seems no lasting tendency for the rates to come down.

The number of deaths in the first four weeks of life was 380 (387 in 1955) giving a neonatal mortality rate of 14.8 compared with 15.9 and 15.1 in the two previous years. This is also the lowest rate ever recorded in the County as is the post neonatal mortality rate of 5.6.

Prematurity

The number of premature live births notified in 1956 was 1,481 (1,385 in 1955) i.e. 5.8% of all live births compared with 5.7% in 1955. The graph below shows the incidence of premature live births over the last seven years, also expressed as a percentage of total live births:—



The number of such births has been increasing steadily since 1950. In six years the number has risen by 341 and the percentage of total live births by 0.9. This is a trend which will need to be watched in the near future.

The number of premature still births notified was 245. Figures in recent years have been as follows:—

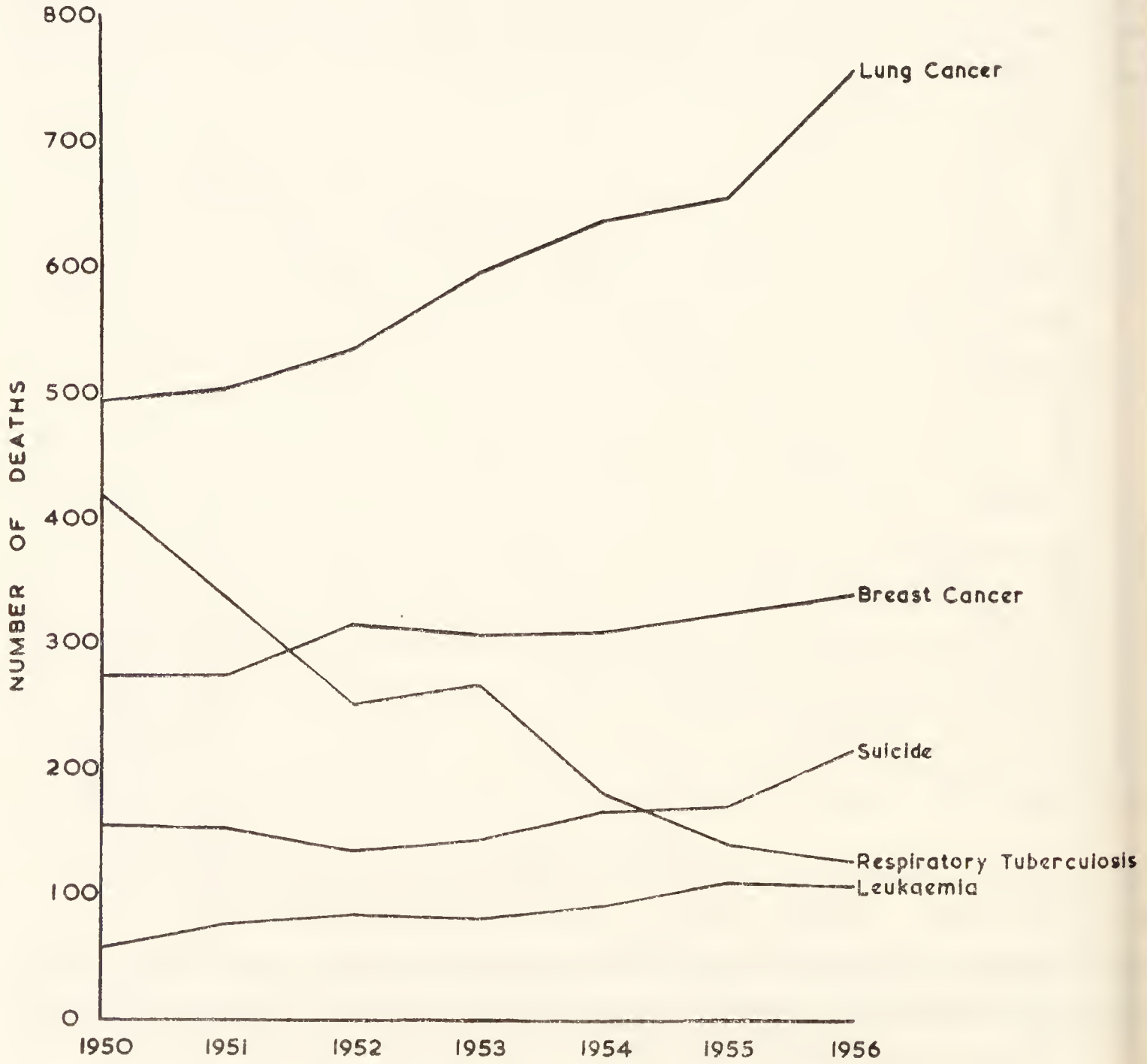
1952	1953	1954	1955	1956
215	229	273	247	245

Mortality

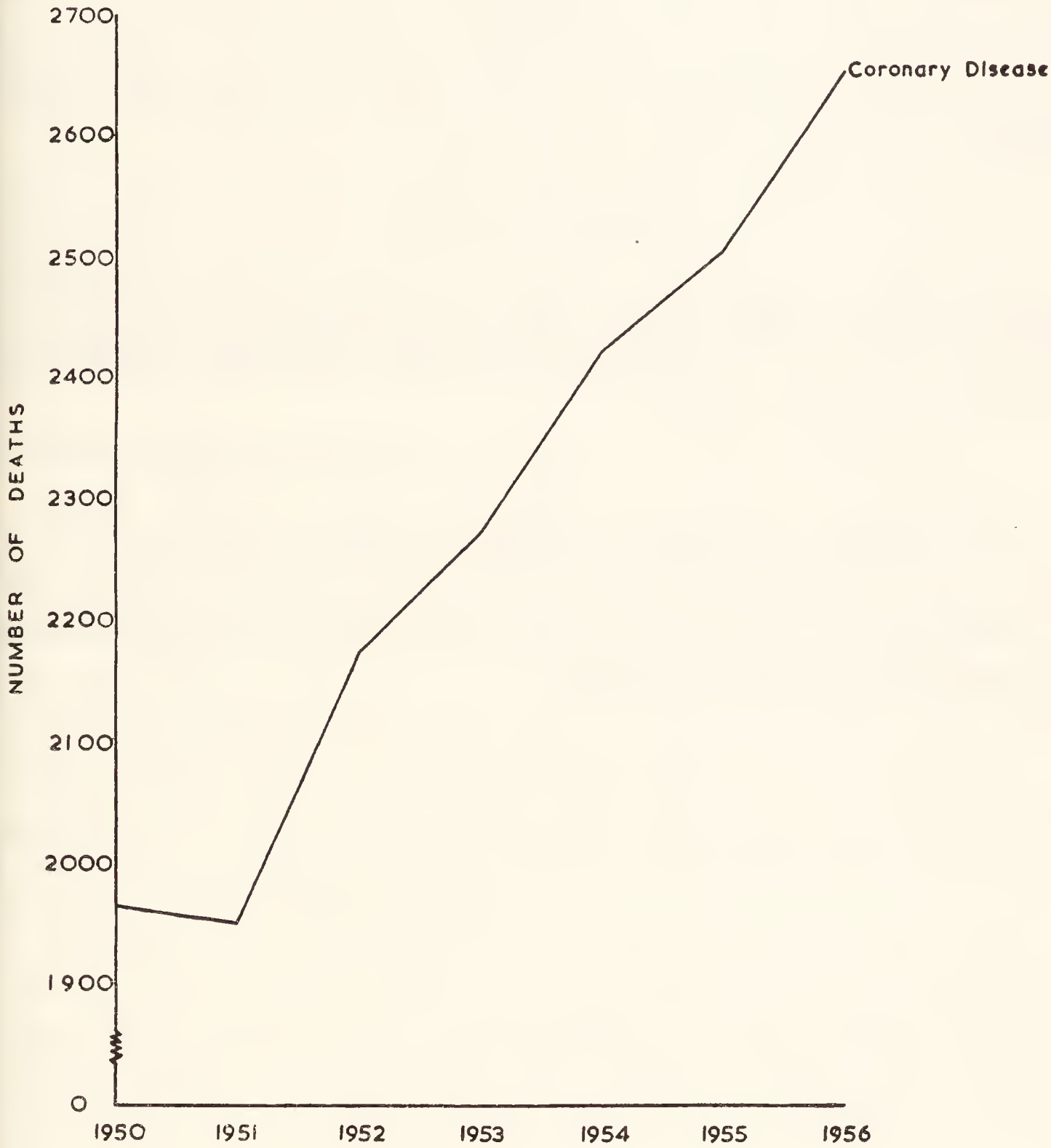
The number of deaths ascribed to diseases of pregnancy and childbirth or to abortion was 12 (11 in 1955) giving a maternal mortality rate of 0.46 per 1,000 births compared with 0.44 and 0.80 in the two previous years. These low post-war rates are being maintained as the average 1951 to 1955 was 0.62%.

The total number of deaths in the Administrative County in 1956 was 18,022 (17,205 in 1955) giving a death rate of 10.4 per 1,000 population compared with 10.1 and 9.7 in the two previous years. When adjusted for comparison purposes this becomes 11.0 compared with 11.7 for England and Wales.

Table III on Page 120 sets out the number of deaths from various causes in the County districts, Health Areas and the County. The following chart shows deaths from five selected causes over the last six years:—



Using the same scale the second chart shows deaths from coronary disease only, over the same period.



It is clear from these two graphs that the increase in deaths due to coronary disease is greater than the other four increases put together. In six years deaths from this disease have risen by about 700. Another fast rising cause of death is lung cancer. This has been rising steadily but this year's increase of over 100 is the highest ever recorded. It is equivalent to about three years' increase in previous years. Breast cancer and leukaemia also show smaller rises whilst the suicide rate reveals a distressing upturn. On the other hand deaths from respiratory tuberculosis have fallen considerably and are now less than one third of the 1950 rate. This fall must now level out but the reduction up till now has been remarkable.

Table II on Page 118 gives the number of deaths in various age groups for each sex for several causes of death. Compared to 1955 most figures show an increase, continuing the trend of the previous year. Mortality in the younger

age groups, however, fell for girls with one remarkable exception—the 0-1 age group. This increased by 13%. On the other hand it was precisely in this age group for boys that mortality fell—by 14%. There was also a small drop in the male 1-5 age group. The increase in the infant mortality rate for girls was due mainly to Congenital Malformation and Pneumonia. The decrease in the male infant mortality rate was due to a variety of ill-defined and "other" diseases.

SICKNESS CLAIMS

The number of new claims to sickness benefit recorded in the 52 weeks ended 1st January, 1957, at local offices of the Ministry of Pensions and National Insurance in the Administrative County was 235,149. Figures for the last five years are as follows:—

1952	1953	1954	1955	1956
200,062	233,795	206,259	233,138	235,149

The incidence of new claims per 1,000 population was 136, compared with 137 and 123 in the two previous years.

SECTION II — GENERAL

STAFF

Central Office

Dr. R. C. Greenberg, an Assistant County Medical Officer in the Romford Health Area, took up duty as senior Medical Officer (Mental Health) on 22nd October, 1956, in succession to the late Dr. H. J. Griffiths who died on 9th March, 1956.

Mr. W. Leak, B.A., who had held the post of Statistician in the Department for nine years resigned on 31st July, 1956. No successor had been appointed to the vacancy thus created at the end of the year.

Combined Medical Service

Harlow and Epping and Ongar District—Dr. I. Ash commenced duty on 13th February, 1956, as Medical Officer of Health of the Epping and Harlow Urban Districts and the Epping and Ongar Rural District and Assistant County Medical Officer in succession to Dr. J. F. Lucey whose resignation was referred to in the report for 1955. Dr. H. Franks, Medical Officer of Health of the Chigwell and Waltham Holy Cross Urban Districts continued to act temporarily as Medical Officer of Health of the three Districts until that date.

Dagenham—Following the resignation of Dr. H. D. H. Robinson as mentioned in the report for 1955, Dr. Helen Mair commenced duty on 16th January, 1956, as Deputy Medical Officer of Health, Borough of Dagenham, and Assistant County Medical Officer.

Colchester—Dr. R. E. Barrett commenced duty on 1st March, 1956, as Assistant Medical Officer, Borough of Colchester, and Assistant County Medical Officer in place of Dr. E. A. Hargreaves whose appointment as Medical Officer of Health of the West Mersea and Wivenhoe Urban Districts, and the Lexden and Winstree Rural District, was referred to in the report for 1955.

Assistant County Medical Officers

Nine changes took place in the staff of Assistant County Medical Officers during the year. No difficulties were experienced in filling the vacancies despite a limited number of candidates. Several of the doctors appointed proved to be definitely interested in making a career in the public health service and to further their interest arrangements were approved towards the end of the year giving Assistant County Medical Officers the opportunity of obtaining practical experience of the work of Medical Officers of Health to Sanitary Authorities with Medical Officers of Health of County Districts. Not more than one Assistant County Medical Officer in each of the eleven Health Areas is, at any one time, permitted, on a voluntary basis and of course, with the agreement of the District Council concerned, to devote one session a week to this work. It is left to the Officers themselves to make the approach to the

District Councils, usually through their Area Medical Officer. Assistant County Medical Officers are also permitted to make their own arrangements to gain such experience outside normal working hours. The response has been encouraging.

Refresher Courses

The facilities organised nationally for post graduate and post certificate instruction were utilised for all grades of staff employed in the Department.

Five members of the medical staff attended courses organised by the Society of Medical Officers of Health ; twenty-one certain of the courses arranged by the British Post Graduate Medical Federation on paediatrics, obstetrics, breast feeding and the care of the school child ; and three the course on the ascertainment of educationally subnormal children and mental defectives arranged by the National Association for Mental Health. Eight Medical Officers attended one week courses in dental anaesthesia at the Eastman Dental Hospital.

In an endeavour to supplement, on an experimental basis in the first instance, the arrangements made at national level for post graduate courses for Assistant County Medical Officers a weekend course for the Department's medical staff was held in March at the County Council's Residential College for Adults at Wansfell, Theydon Bois, Epping. The theme of the course was " The Handicapped Child." Lecturers included Miss Edith Whetnell (" The Deaf Child "), Miss Norah Gibbs (" Ascertainment of Borderline Educationally Sub-Normal and Mentally Defective Children "), Dr. Robert Benson (" Cardiac Murmurs "), Dr. Paul E. Polani (" The Spastic Child "), Dr. John D. Kershaw ("The Choice of School for the Handicapped Child "), and Dr. Jean Parker (" The Handicapped Child and Employment "). The introductory talk was given by Dr. P. Henderson, Principal Medical Officer, Ministry of Education. Thirty-eight Medical Officers attended.

One hundred and eleven health visitors, midwives, home-nurse midwives, and home nurses attended courses sponsored by the Women Public Health Officers' Association, the Royal College of Nursing, the Royal College of Midwives and the Queen's Institute of District Nursing, whilst three Supervisors of Occupation Centres took advantage of a course organised by the National Association for Mental Health.

Two members of the Senior Administrative Staff in the Health Areas took part in a weekend course organised by the Association of Public Health Lay Administrators.

TRANSPORT OF STAFF

The policy of providing county cars or authorising the use of private cars for official purposes in respect of members of the staff of the Health Department whose appointments necessitate the use of transport in connection with their duties was continued. In addition a 5-cwt. van was provided for use in connection with the Occupational Therapy service. It is used for the transport

of equipment and materials and has enabled a greatly increased number of domiciliary visits to be undertaken by the member of the staff to whom it has been allocated.

During the year thirty members of the staff of the Department took advantage of the County Council's Assisted Purchase Scheme to purchase vehicles for use on County business. In addition two officers purchased the County cars which had been allocated to them, and continued to use these vehicles in connection with their duties.

On the 31st December, 1956, 514 officers employed in the County Council's Health Services were using motor transport in connection with their official duties. Of these 227 were using vehicles provided by the County Council, and the remaining 287 were authorised to use their privately owned motor cars, motor cycles, or motor assisted pedal cycles. The comparable figures for 1955 were 490, 242 and 248 respectively.

SITES AND BUILDINGS

Health Centres

During the year, discussions were held with general medical practitioners, the Executive Council, and the Development Corporation, together with other interested bodies, with a view to reaching agreement as to the scope of the Health Centre programme for Basildon, following the abandonment of the scheme for the Cranes/Fryerns area, owing to the lack of support by general medical practitioners.

The suggestion is that Health Centres should be provided in the Town Centre and in the neighbourhood centres of Vange (south of the railway) and Laindon (north of the railway), but the final decision of the Executive Council for Essex was still awaited at the end of the year. From statistics supplied by the Development Corporation, however, it is apparent that the County Council will in any event have to provide premises for clinic purposes in those areas.

Preliminary steps have been taken in regard to hiring a pair of houses from the Development Corporation for temporary clinic or Health Centre purposes, in the event of it proving impossible to proceed with schemes for new premises at an early date.

HAROLD HILL HEALTH CENTRE, ROMFORD

The smoothness of working evident in the first eighteen months of this Health Centre's operation continued in 1956.

General Practitioner Work.—A total of 23,715 patients attended the

surgeries of the general practitioners working from the Centre, the monthly figures being as follows:—

Jan.	Feb.	Mar.	Apr.	May	June
1,796	1,946	2,372	1,661	1,943	2,213
July	Aug.	Sept.	Oct.	Nov.	Dec.
1,938	1,595	2,397	1,888	2,036	1,930

The highest attendance in any one week was 573 patients during the week ended 11th February, 1956, and the monthly average was 1,976 patients as compared with 1,955 during 1955.

The doctors performed 141 minor operations as compared with 155 during 1955 and the nursing staff carried out 4,888 treatments (as against 5,852 in 1955) as follows:—

Jan.	Feb.	Mar.	Apr.	May	June
425	419	329	320	428	390
July	Aug.	Sept.	Oct.	Nov.	Dec.
562	424	383	349	506	353

General Dental Work.—The executive Committee's dental surgeon treated 394 patients during the year compared with 410 in 1955.

Local Health Authority Work.—Attendances at the County Council's clinics were as follows:—

Ante-natal and post-natal clinics	622
Child Welfare Centre	7,239
Minor Ailment Clinics	503
Speech Therapy Clinics	734
	9,098

The total for 1955 was 8,983.

The following numbers of patients were seen by the dental officer who attends at the Centre, as compared with totals of 814 and 755 for 1955:—

	Examined	Treated
Expectant and nursing mothers	74	71
Children under 5 years of age	202	157
School children	973	955
	1,249	1,183

The distribution of Welfare Foods and other nutriments continued during the year and lectures and film shows were provided as part of the Committee's Health Education arrangements.

SPECIALIST SERVICES.—The clinics provided by the Specialist Services as detailed below dealt with the following numbers of patients :—

	No. of Sessions	No. of Attendances
Physiotherapy	206	1,918
Orthopaedic ascertainment clinics	16	155
Ophthalmic Surgeon	41	795
	263	2,868

The corresponding totals for 1955 were 217 and 1,989. In addition 60 attendances were made by patients for Artificial Sunlight treatment.

REPORT OF THE PROFESSIONAL COMMITTEE—I am indebted to Dr. J. G. Fife, the Chairman of the Professional Committee for the following report :—

" This Second Report of the Professional Committee of the Harold Hill Health Centre on the operation of the Centre covers the eighteen months from July 1955 to December 1956 by virtue of the fact that it was decided that the Committee's administrative year should terminate on the 31st December. Consequently, future reports of the Committee will be prepared annually and will relate to the calendar year. Unlike the first report, which gave a detailed history leading to the establishment of the Health Centre, this second report is in consequence somewhat brief.

The Professional Committee

During the period under review the Professional Committee met on six occasions. Meetings were always well attended, the work proceeded satisfactorily, and two new doctors practising at the Centre, being partners of practitioners already holding sessions at the Centre, were welcomed to the Committee.

General Medical Services : Legal Agreements

The drawing up of contracts between the medical practitioners and the Executive Council for the use and facilities of the practitioners' suites is still outstanding and has proved to be a protracted and difficult matter. It was expected, however, that the remaining problems would soon be resolved. A great amount of time has been spent in consultation, attendance at conferences and in correspondence by the parties concerned, in trying to smooth out the difficulties. The main points at issue had been the question of any future variation of the present amount agreed upon between the County Council and the Executive Council for the accommodation and facilities provided for general medical services at the Centre. The Chairman and Vice-Chairman of the Professional Committee had been invited to discussions between the County Council and the Executive Council and it had been agreed that the payment of £250 per suite should not be altered until after March, 1957, but it was suggested that it should be increased to £300 per suite as from that date.

The Professional Committee was subsequently consulted on this proposal and expressed the opinion

(1) that in view of their already heavy commitments at their own surgeries they would be unable to meet any contribution above the suggested figure of £300 per suite. They were prepared to accept this figure as from 1st April, 1957, for three years without prejudice to their right to review at the end of that period.

(2) that with regard to any suggestion of economies by the reduction of staff it was considered that the present staff and facilities are related to the present figure of £250 per suite and if such staff or facilities are to be reduced, there should be a corresponding adjustment in the proposed figure of £300. The practitioners gave their assurance, however, that they would bear well in mind and be always ready to suggest any economies which might be made without impairing the efficiency of the Health Centre services.

The practitioners also drew attention to the fact that the provision of nursing staff at the Health Centre effected a reduction of one district nurse on the estate thereby producing a saving to the County Council and, in addition, a great deal of work is done at the Centre, with the resultant saving in time which would otherwise be done on the nurses' rounds on the estate.

Sessions

One practitioner had relinquished his sessions at the Centre, and another practitioner had applied for and had been allocated the vacant sessions.

Attendances by Patients

The following table gives the number of patients attending the Health Centre for general medical services :—

Number of Patients Attending	*First Year ending* 23.7.55			*Seven Months* 1.6.55 to 31.12.55			*Second Year ending* 31.12.56		
		L	G		L	G		L	G
(a) Doctors' Surgeries	17,032			10,226			18,827		
(b) For Treatment	5,629	74	15	3,590	53	4	4,888	126	10

" L "—Local Anaesthetics. " G "—General Anaesthetics.

Equipment, Drugs and Dressings

The practitioners had recommended the provision of a galvano cautery, combined with an electric proctoscope and vaginal speculum. This had been duly supplied and was serving a very useful purpose. Experience had shown that some drugs and items of equipment were not being used, whilst a few additional items were needed. Appropriate adjustments had been made, the few unused instruments having been taken back into stock by the County Council.

General Dental Services

The number of new patients accepted for treatment by the general dental practitioner at the Centre is set out below, together with the number of broken appointments :—

Period		Number of new patients	Number of broken appointments
7th February, 1955 to 31st December, 1955	....	410	313
1st January, 1956 to 31st December, 1956	....	394	526

Evening Sessions

At the request of the Executive Council the Committee considered a suggestion that evening dental sessions might be provided but, although the practitioners agreed that such sessions would be very convenient from the patients' point of view, there was no evidence of any demand for evening sessions.

Co-operation with Local Health Authority

Working under one roof and in close proximity has brought about an improved liaison between the General Medical and Dental Services and those Services provided by the Local Health Authority and has been an important factor in improving relationships between the practitioners and other staffs."

AVELEY HEALTH CENTRE, SOUTH OCKENDON.

A very successful year is recorded for the Aveley Health Centre which opened on 16th December, 1955. Unlike the Harold Hill Health Centre (where the general medical practitioners' surgeries are used as branch surgeries on a part-time basis) the practitioners at Aveley have the exclusive use of their surgeries and their practices are centred on the building.

General Practitioner Work. During the period 16th December, 1955 to 31st December, 1956, a total of 45,000 patients attended the practitioners' surgeries the monthly figures being as follows :—

December to June	July	August	Sept.	Oct.	Nov.	Dec.
21,925	2,725	2,881	4,300	5,250	4,645	3,274

(Individual figures are not available for the months December to June).

The highest attendance during any one week was 1,050 during October, 1956.

The doctors themselves performed 65 minor operations at the Centre and the nursing staff carried out 9,726 treatments on their behalf as follows :—

December 1955	January 1956	February	March	April	May	June
131	482	491	738	705	860	802

July	August	September	October	November	December
722	801	968	1,325	974	727

General Dental Work.—The number of patients treated up to the end of the year was 639.

Local Health Authority Work.—Attendances at the County Council's clinics were :—

Ante-natal and post-natal clinics	959
Women's welfare clinics	265
Child welfare centre	5,729
Speech therapy clinics	605
Total	7,558

In addition 1,315 children attended for vaccination or immunisation.

The following patients were seen by the Dental Officer who attends at the Centre :—

		Examined	Treated
Expectant and nursing mothers	....	35	19
Children under 5 years of age	....	197	158
School children	....	1,817	1,212
		2,049	1,389

Welfare Foods and other nutriments were distributed from the Centre and one lecture and film show was held.

Specialist Services—40 physiotherapy sessions were provided by the Regional Hospital Board. A total of 939 attendances were made at these sessions.

Report of Professional Committee. Dr. W. T. G. Boul, who is Chairman of the Professional Committee, sends me a report covering the period from the opening of the Centre until 31st December, 1956 from which the following is an extract :—

The Centre, having been opened on the 12th December, 1955, has now been in operation for its first year and the first report is therefore presented herewith.

Introduction

On the 6th June, 1955, the first full Meeting of the Professional Committee was held, the Professional Committee including four General Medical Practitioners, a General Dental Surgeon, the County Medical Officer and the Area Medical Officer. The Committee elected one of their members as Chairman who continued in office until December, 1956, when he was re-elected for a further period of twelve months. The Clerk of the Essex Executive Council very kindly agreed to act as Honorary Secretary to the Committee.

Staffing

During the year the Centre suffered a severe loss in the most unfortunate death of Dr. B. G. Kiddle, one of the General Practitioners, who was a most popular Doctor with his colleagues and patients. Indeed, at the request of his patients a memorial plaque is being placed in the entrance hall to the General Practitioners' Wing.

The First Year

No matters of great moment have had to be decided by the Professional Committee as the arrangements made at the commencement were found to be quite satisfactory.

At the beginning of the year the average weekly attendance in the General Practitioners' Wing was some 200 and this has increased with great regularity until, at the end of December, 1956, the average attendance had approached 900 each week.

During the year there was an increasing practice of patients attending the Centre in alleged emergency and, while first-aid is not refused, efforts have been made by the Professional Committee, through the Area Medical Officer, to inform the various schools and factories in the area that the Centre is not to be regarded as an out-patients' department of a hospital. It is hoped, therefore, that this practice will be minimised in the future.

The main outstanding problem of the first year is the formal agreement of the General Medical Practitioners and the Essex Executive Council which has not yet been drawn up.

Little has been said of the General Dental Services provided by the Essex Executive Council in the building. At the commencement of the year the number of patients attending was relatively small. This, however, has increased with great rapidity and there is no doubt whatever but that the provision of dental services could be greatly increased for the population with advantage.

Statistics

Statistics regarding the various services undertaken at the Health Centre during the period under review are shown below.

(a) *General Medical Practitioners*

Telephone Calls	G.M.P's and Dental	3,000
	Local Authority	1,978
Ambulances booked from the Health Centre	Local	250
	London Area	70

(b) *General Dental Services*

Total attendances made	1,698
Anaesthetics administered	311
(Whenever possible by patient's own Doctor)	
Number of dentures supplied	116
Number of X-rays taken	66

Co-operation with other Authorities

During the year Physiotherapy sessions have been held by a Physiotherapist appointed by the Thurrock and South East Essex Hospital Management Committee. Unfortunately, however, this service has suffered some vicissitudes and, at the moment, is in abeyance. Applications have been received for the use of rooms in the building by the Probation Officer of the Essex County Council and the Registrar of Births, Deaths and Marriages, both of which have been agreed to.

There are no Chiropody services in the building. It is the considered opinion of the Professional Committee that such would be of great value to the older people living on the Estate."

Group Practice and Health Clinic Centres

Following discussions between the Harlow Development Corporation and the Nuffield Provincial Hospitals Trust, the latter body agreed to finance the provision of three further Group Practice and Health Clinic Centres at Harlow; in the Town Centre, in the Tye Green and Great Parndon areas respectively. It was anticipated that the erection of the first of these would commence early in 1957. A substantial measure of agreement had also been reached in respect of the planning of the second of these three (for the Tye Green area).

Health Services Clinics

The erection of the Health Services Clinics at Great Wakering (South East Essex Health Area) and Aveley Village (South Essex Health Area) was completed in January, 1956 and the new clinic at St. Mary's Lane, Upminster (South Essex Health Area), was completed and opened to the public in September.

A start was made on the erection of new clinics at Three Arch Bridge Estate, Brentwood (South Essex Health Area) and at Oxlow Lane, Dagenham (Dagenham Health Area); both buildings were nearing completion by the end of the year.

In view of the continued restriction of capital expenditure, it was not found possible to put in hand any of the other outstanding clinic schemes from the Health Committee's Capital Building Programme, and no further sites were acquired for this purpose. Negotiations with the Ministry of Health, however, resulted in agreement as to the need for a new clinic at Marks Gate Estate (Dagenham Health Area), but the Minister was not able to indicate when he would be able to allow erection to commence.

Negotiations were continued during the year for the purchase of sites at:—

Manningtree
Colchester (Shrub End Estate)
Hutton
Ilford (Heathcote Avenue)
Walthamstow (Priory Court)

and for the erection in conjunction with the Education Committee, of a building in The Drive at Loughton to accommodate a Health Services Clinic and a branch library.

Negotiations were also continued with the Epping and Ongar Rural District Council for the leasing or purchase of the former Council Offices at Bowes Field, Ongar, for adaptation for clinic purposes.

Ambulance Stations

Two new Ambulance Stations were completed and became operational

during the year at Maldon, providing accommodation for 2 vehicles and at Dagenham (20 vehicles) the latter to replace the premises formerly used in Barking and Dagenham.

Good progress was made with the new Station and Control Room at Aldborough Road, Ilford, which will provide accommodation for 20 vehicles. The Divisional Control Room which covers the area of the County adjacent to the Metropolis will be accommodated on the first floor of the new building.

Occupation Centres

Reference was made in the Report for the year 1955 to the approval given to the standard plan for Occupation Centres established as part of the Mental Health Service and to the proposed provision of purpose built Centres at Chelmsford and Grays.

During the year under review a suitable site was obtained for the erection of the Centre in Chelmsford and in anticipation of centres being needed in the future at Basildon and Harlow arrangements were made to reserve sites in these towns. Furthermore, it was decided in principle to provide purpose built premises to replace those Junior Occupation Centres which are at present accommodated in hired premises and in this connection provisional arrangements were made to secure a site in Romford for the erection of a centre to replace the Dagenham Centre.

MEDICAL EXAMINATION OF STAFF

During the year 1956 the medical examination of persons selected for appointment, as well as of members of the staff of the County Council, involved a total of 3,390 medical examinations, 748 of which were on behalf of other local authorities. This figure compares with 3,420 in the previous year and 3,355 in 1954. Included in the total are 869 examinations carried out in respect of entrants to courses of training for teaching and to the teaching profession.

LABORATORY SERVICE

In accordance with arrangements which have been detailed in previous reports, county district councils may send samples of milk, ice cream, water and sewage effluent to one of the following laboratories :—

Public Health Laboratory, Cambridge
Public Health Laboratory, Chelmsford
Public Health Laboratory, Ipswich
Public Health Laboratory, Southend-on-Sea
Counties Public Health Laboratories, London

the first four being available for bacteriological work only.

As from 24th September, 1956, samples of designated milk taken by officers of the Department for the prescribed tests under the Regulations of

949 as indicated on pages 38 and 39 were submitted to the new Public Health Laboratory at Chelmsford. Previous to this date these samples were submitted o the Public Health Laboratory at Southend-on-Sea.

The following is a summary of the samples examined by the Laboratories luring 1956 :—

Nature of Sample	Number of examples examined by Public Health Laboratories	Counties Public Health Laboratories
Milk	1,128	761
*Ice Cream (including lollies)	894	789
Other foods	158	98
Water	632	678
Sewage	—	39
Totals	2,812	2,365

* Taken mostly by Public Health Inspectors of county district councils.

MILK SUPPLY

Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations 1949.

The County Council is responsible for the licensing and supervision of nilk pasteurising and sterilising establishments in that part of the County for which it is the Food and Drugs Authority. There were 11 pasteurising plants nd one sterilising plant licensed, which together dealt with about 38,000 gallons f milk a day. To these establishments 601 visits were made during the year, nd routine samples of milk were obtained and submitted to the special examinations laid down in Parts II, III and IV of the Third Schedule of the Regulations, as follows :—

	Turbidity Test	Phosphatase Test	Methylene Blue Test
Number submitted	26	561	561
Number failed	—	1	2
Number void	—	—	—

Unsatisfactory reports were investigated immediately and reported as a outine to the Ministry of Agriculture, Fisheries and Food.

From time to time samples of empty milk bottles (410 in all) were taken rom bottle washing machines in order to check the efficiency of the washing process. The results were generally satisfactory, but where necessary appropriate action was taken.

The high standard of results has only been achieved by unremitting care, nd the small number of unsatisfactory samples does not mean that there can s yet be any slackening in the supervision of these milk supplies.

Milk (Special Designation) (Specified Areas) Orders

A series of Milk (Special Designation) (Specified Areas) Orders have laid down that in " specified areas " all milk sold by retail must be " specially designated " milk, i.e. " pasteurised," " sterilised " or " tuberculin tested." Such Orders cover the whole of the Administrative County of Essex with the exception of the Borough of Saffron Walden, the Urban District of Halstead, the Rural Districts of Dunmow, Halstead and Saffron Walden and a few parishes in the north west of the Braintree Rural District. The County Council enforce the provisions of the Orders in those parts of the County for which they are the Food and Drugs Authority, and no infringements of the provisions of the Orders were found during 1956.

Biological Sampling

The general policy of taking two samples of milk each year for biological examination from each retailer of ordinary milk in the County, excluding the " specified areas," and one sample each year from each producer of raw milk was continued, although it is difficult in practice fully to attain this objective, and there is also a limit to the number of samples each week which can be examined by the laboratories. In addition, a number of samples of milk for biological examination were taken from tuberculin tested milk supplies.

In " specified areas " samples of milk are taken for biological examination from retailers of tuberculin tested milk.

A summary of the results obtained from examination of samples submitted is given below :—

Number of reports received	615*
Number inconclusive	15
Number free from tubercle bacilli	578
Number containing tubercle bacilli	19

* Three samples were void for tubercle bacilli.

Of the 19 samples containing tubercle bacilli, 17 were ungraded milk and two were from tuberculin tested herds.

Each positive result was reported to the Divisional Inspector of the Ministry of Agriculture, Fisheries and Food or other appropriate authority, and as a result eight animals were slaughtered under the Tuberculosis Order 1938 and five (one died and four sold for slaughter) were removed from the herds. Veterinary investigation showed that the two tuberculin tested herds were non-tuberculous.

One hundred and sixty five samples of milk submitted for biological examination were also examined for the presence of brucella abortus organisms and in 13 cases samples were reported as being " brucella positive." Such results and also positive tubercle bacilli results are notified to the Medical Officer of Health of the county district concerned in order that he may take appropriate action in accordance with the provisions of paragraph 20 of Part VII of the Milk and Dairies Regulations 1949.

Milk-in-Schools Scheme

Milk supplies to maintained schools continued to be kept under review during the year.

As from 1st September, 1956, local education authorities assumed responsibility for supplying milk to pupils in non-maintained schools as well as maintained schools. Milk supplies to those schools desirous of participating in the scheme were therefore arranged by means of the normal tendering procedure, and these have also been kept under review.

The pasteurised milk was submitted to the special tests laid down in the Third Schedule of the Milk (Special Designations) (Pasteurised and Sterilised Milk) Regulations 1949, and the only tuberculin tested milk supply was submitted to the test laid down in the Third Schedule of the Milk (Special Designation) (Raw Milk) Regulations 1949. The tuberculin tested milk was submitted to biological examination and where the milk was pasteurised by the holder process, this was also submitted to biological examination.

The results obtained from testing of samples of milk from schools were as follows :—

(a)	Biological Examination—	
	Number of reports received	6
	Number inconclusive	—
	Number free from tubercle bacilli	6
	Number containing tubercle bacilli	—
(b)	Bacteriological Examination—	
	Number of samples taken	468
	Number void	4
	Number satisfactory	442
	Number which failed to pass the prescribed tests	22

Unsatisfactory samples were investigated and rechecked until the necessary improvement was effected.

County Residential Establishments

Milk supplies to the Council's residential establishments were sampled on the same basis as for schools and the samples taken were all found to be satisfactory upon being tested.

ICE CREAM

During the year 35 of the 41 County District Councils in Essex exercised their sampling powers as regards ice cream and utilised Public Health Laboratory

facilities in accordance with arrangements obtaining in previous years, as follows :—

Laboratory	*No. of Authorities*	*No. of Samples*
Counties Public Health Laboratory, Victoria Street, London	21*	572
Public Health Laboratory, County Hall, London	1	16
Public Health Laboratory, Southend	7	601
Public Health Laboratory, Ipswich	5	111
Public Health Laboratory, Cambridge	2	163
	36*	1,463

* Including the Essex County Council.

Samples are examined in accordance with the Ministry of Health's provisional grading scheme involving the use of Methylene Blue which was introduced in 1947 and which still applies. The following table gives the results obtained throughout the past year.

	Grading				
Month	I	II	III	IV	Totals
January	53	3	—	—	56
February	44	3	—	—	47
March	54	6	—	—	60
April	88	13	—	1	102
May	155	14	12	—	181
June	161	21	17	9	208
July	166	47	19	21	253
August	166	31	21	5	223
September	101	24	12	7	144
October	69	19	9	7	104
November	35	8	1	1	45
December	34	5	1	—	40
Totals	1,126	194	92	51	1,463
%	76.9	13.3	6.3	3.5	100

The table shows the larger number of samples taken in summer as compared with winter and the higher numbers of Grade III and IV samples at the former time of year.

Samples submitted to the Counties Public Health Laboratories, London are also subjected to the plate count and tests for determining the presence of coliform and bacillus coli organisms, the form of bacteriological test employed being more accurate than that generally used. From results useful comparisons may be made and a more accurate picture of the bacterial quality of the product obtained than by the grading method alone.

In addition to ice cream, 221 samples of ice lollies were examined, mostly

by the Counties Public Health Laboratories. Though being a far less favourable medium for the growth of bacteria than ice cream, there is often found a remarkable variation of bacterial content as regards the product of some of the smaller manufacturers, and as between different kinds of lollies. The following table gives a summary of the results of 192 samples examined by the Counties Public Health Laboratories showing the relationship between the pH of the lolly and the plate count at 37°C :—

pH					*Plate Count per ml.*
Less than 3	*3 to 4*	*4 to 5*	*Over 5*		
14	88	6	3	....	0—100
—	—	4	23	....	101—500
—	—	—	5	....	501—1,000
—	—	3	9	....	1,001—5,000
—	—	8	29	....	Over 5,000

In non-technical terms, the more acid the lolly, the less likely is it to contain large numbers of bacteria.

FOOD AND DRUGS ACT 1955

Officers of the Weights and Measures Department continued during 1956 to sample food and drugs throughout that part of the County for which the County Council is the Food and Drugs Authority and I am indebted to the Chief Inspector of Weights and Measures for the following report of the work done :—

" During the year 749 samples of food and drugs (other than milk) were taken and of this number 26 were unsatisfactory in some respect. 1,347 samples of milk were taken and 32 proved to be unsatisfactory.

In addition to the taking of samples on retail premises, special attention is paid to sampling of the food supplied under contract to schools, canteens and hospitals. Generally speaking this food is of a high standard.

As might be expected, frequent complaints are received from members of the public concerning their food purchases. During the year, the attention of the Department was drawn to a fruit loaf containing a drawing pin, greaseproof paper in a meat patty, a piece of wire in a bun and a similar foreign body in a doughnut. In each case it was found that elaborate precautions are taken to prevent foreign bodies being present in foodstuffs but that despite this, accidents do occur. It is somewhat difficult to institute legal proceedings in such cases as purchasers are, on the whole, reluctant to give the necessary evidence in court.

Of the 32 unsatisfactory milk samples mentioned earlier, 22 contained added water in quantities varying between 1 % and 50 %. This latter case was in respect of hot milk served in a cafe and adulterated by the addition of hot

water. The remaining samples were deficient in milk fat by quantities ranging from 3% to 29%. This last-mentioned sample was one of Channel Island milk.

The remaining samples calling for comment were :—

Milk Powder.—Two samples, submitted as the result of a complaint, were found to have a high acidity and stale taste. One contained brownish matter which was found to be burnt or charred milk powder. The remaining stocks were withdrawn from use.

Bread.—One sample of brown bread was submitted as there was a well defined white streak running through its centre. It was found that there had been accidentally a small portion of white dough admixed in the normal brown mix.

Five further samples of bread were submitted to determine whether the claims made as regards their protein fortification were justified. In each case analysis showed that the claim was not substantiated. The baker's attention was drawn to the matter and an assurance received that the matter would be remedied. Further samples will be taken from time to time.

Biscuits—Cheese Filled.—Two samples which had a cheese and margarine filling were submitted as it was alleged that indigestion had followed their consumption. It was found that the filling had a soapy taste and was rancid and thus the biscuits were out of condition and no longer suitable for human consumption. All remaining stocks were withdrawn from sale.

Rolls and Butter.—Four samples of rolls and butter were found to be unsatisfactory in that the fat on the rolls was ascertained to consist either of margarine or of a mixture of margarine and butter.

Flour.—Two samples of self-raising flour were found to be deficient in carbon dioxide and two samples of plain flour were deficient in creta preparata (a flour additive) and also in vitamin B1.

Glace Cherries.—It is prescribed that Glace Cherries shall not contain more than 100 parts per million of sulphur dioxide—a preservative. One sample was found to contain 120 parts per million which is slightly in excess of the maximum amount. The manufacturers' attention has been drawn to the matter.

Macaroni and Cheese.—This was a proprietory preparation the label of which stated that the *complete* ingredients were present to provide " macaroni with cheese sauce." It was noted, however, that it was necessary to add margarine and milk and thus the statement 'complete ingredients' was considered to be incorrect and misleading. The label has, by arrangement with the manufacturers, been amended.

Sausages.—One sample, sold as containing 75% meat, was found on analysis to contain only 67%.

Hazelnut Creams.—These were sweets which consisted of small cones of fondant with a nut embedded in the top. Examination showed that the nuts were not hazelnuts but groundnuts—commonly known as monkey nuts. A caution was issued.

Braibanti and Piprikasteuer.—These samples which were of foreign origin consisted of semolina with eggs and red pepper respectively. Exception was taken to them in that the ingredients were stated in a foreign language and it was felt that the Labelling of Food Order intended that such information should be given in English.

Flavourings.—Two samples were found to be preserved with benzoic acid. The use of this preservative is not permitted in flavourings and the matter was taken up with the manufacturers.

Legal Proceedings.—Prosecutions were undertaken in 18 cases (including 13 in respect of milk). Fines and costs were imposed which totalled £75.1.0d. In the case of the remaining unsatisfactory samples, the attention of the manufacturer or packer was drawn to the discrepancy and an assurance received that the position would be remedied."

WATER SUPPLIES AND SEWERAGE

Routine sampling of the water supplies of the County was carried out by the water undertakers, the County Council and the county district councils. The general bacteriological standard of public water supplies in Essex has continued to be satisfactory.

The rainfall during the year (measured at the Langford Waterworks) was 19.23 inches as compared with 20.28 inches in 1955. The average is 20.86 inches.

Owing to the wet summer the water resources in the County were sufficient to meet demands although local distribution difficulties did occur. In the area supplied by the principal undertakers domestic consumption is becoming stabilised between 25-30 gallons per head per day, but on the other hand in some parts of the County metered water consumption is increasing considerably owing to the demands of industry.

The proposed building of the nuclear power station at Bradwell-on-Sea focussed attention upon industrial demands for water, and the question of small additional supplies being made available by the Metropolitan Water Board was discussed. The potential demand for industrial water at Bradwell is stated to be 250,000 g.p.d., and although this is a large quantity of water, it is not large when considered in relation to the water consumption in the whole of the County.

During the year the Hanningfield reservoir scheme was sufficiently far advanced for water to be put into supply and although the quantities initially available from this source will be small, the quantities available will increase as the work progresses and the reservoir is filled up.

The Harlow Development Corporation Water Undertaking was transferred to the Herts & Essex Waterworks Company Limited, so bringing about a unification in the control and distribution of the water resources in this area of the County.

The main pumping station of the Halstead Rural District Council's comprehensive water scheme was also brought into operation. Upon the completion of this comprehensive water supply scheme all the Rural Districts in the County will have available extensive piped water supplies. This does not mean that no further work will be required on rural water supplies as increasing demands will mean constant attention and improvement of sources, pumping stations, service reservoirs and supply systems. Several such schemes are receiving consideration.

In the matter of sewerage and sewage disposal, two outstanding items are worthy of mention :

(1) The question of the setting up of the Middle Lee main drainage authority. This, it seems, has been under consideration since about 1866, but meetings during the year indicate that agreement amongst the various authorities, particularly in Hertfordshire, is now more likely to be obtained. The scheme mostly affects Hertfordshire authorities, including Stevenage New Town. In Essex it affects Harlow New Town and some small adjacent parts of the Epping and Ongar Rural District.

(2) The other drainage problem worthy of mention is the future arrangements for the drainage of South Essex in the areas of Romford, Hornchurch Dagenham and part of Brentwood.

The County Council's Consulting Engineers many years ago advised upon a scheme for the co-ordination of the drainage in these areas, but unfortunately the local authorities concerned have not all agreed to the proposals for financial reasons. During the year a conference of the authorities concerned was organised by the Essex River Board, and the position at the end of the year was that a report had been obtained from the County Council's Consulting Engineers upon revised estimates, and this report is to be considered by the representatives of the authorities concerned.

There is an obvious need for proper co-ordination of sewage disposal in this part of the County, and in view of the deteriorating conditions in this respect in the area, it is to be hoped that some agreement will not be long delayed, as the alternative, it seems, will be the making of an order by the appropriate Ministry to set up a joint drainage authority for the area.

Rural Water Supplies and Sewerage Acts 1944 to 1955

During the year 17 schemes of water supply, sewerage and sewage disposal were submitted by county district councils prior to making application for contributions by the Ministry of Housing and Local Government and the County Council under the provisions of the Rural Water Supplies and Sewerage Acts 1944/55, involving a total estimated cost of £439,299 and were examined. The necessary consultations and inspections were made with the Consulting

Engineers and officers of the local authorities concerned to ensure compliance with the provisions of the County Council's Grants Scheme.

In 1956 the Ministry of Housing and Local Government undertook provisionally to allocate grants towards the following schemes :—

	Estimated Cost £	*Ministry Grant* £
DUNMOW R.D.—		
Sewerage	57,905	440 per half year for 30 years
EPPING & ONGAR R.D.		
Water main extensions—Blackmore, Doddinghurst & Willingale	11,285	110 per half year for 30 years
Sewerage	41,000	960 p.a. for 30 years
Sewerage	16,600	400 p.a. for 30 years
Water main extension— Magdalen Laver	1,820	1,000 (from Ministry of Agriculture Fisheries and Food)
HALSTEAD R.D.—		
Sewerage and sewage disposal	27,600	335 per half year for 30 years
Comprehensive water supply	212,000	1,980 per half year for 30 years
ROCHFORD R.D.—		
Sewerage	11,244	120 per half year for 30 years
Sewerage	5,854 (revised)	900 (revised)
TENDRING R.D. —		
Water main extension	11,103	160 p.a. for 30 years
Water main extension	2,953 (revised)	650 (revised)

The following schemes were approved by the County Council for revenue grant purposes during the year under review :—

Braintree R.D.	Water mains to serve housing estates.
	Water main extension, Rayne.
	Purchase of Air Ministry water main, Marks Hall Airfield.
Braintree R.D. and Halstead R.D.	Purchase of Air Ministry water main, Wethersfield/Gosfield.
Dunmow R.D.	Sewerage, Bannister Green, Felstead.
	Sewerage, Upper Chelmer Valley.
	Sewerage and sewage disposal, Barnston.
Epping & Ongar R.D.	Water main extensions, Blackmore, Doddinghurst and Willingale.
	Sewerage, Stapleford Abbots.
	Sewerage, Moreton.
	Water main extension, Kiln Road, North Weald.
	Water main extension, Magdalen Laver.
Halstead R.D.	Sewerage and sewage disposal, Bures Hamlet.
	Comprehensive water supply scheme, Stage II.
Rochford R.D.	Sewerage, Folly Lane, Hockley.
Tendring R.D.....	Water main extension, Weeley & St. Osyth.

The annual inspection of water supply and sewerage schemes in respect of which the County Council makes contributions was carried out in eight rural districts during the year and the works were found to be satisfactory in every district.

Public Health Act, 1936, Section 307

In accordance with the provisions of their approved scheme to give effect to Section 307 of the Public Health Act 1936, and the provisions of the Rural Water Supplies and Sewerage Acts 1944/55, the County Council agreed to make payment of the following amounts (being the approved estimated grants payable in respect of the financial year 1956-57) to the under-mentioned Rural District Councils :—

Rural District Council	*Amount* £
Braintree	3,832
Dunmow	8,139
Epping and Ongar	6,700
Halstead	12,212
Lexden and Winstree	3,912
Rochford	3,354
Saffron Walden	3,091
Tendring	2,740
Total	£43,980

REFUSE DISPOSAL

The depositing of refuse in the County of Essex by contractors from outside the County and by Local Authorities tipping outside their own boundaries, is controlled by the Essex County Council Act 1933. Approximately 1,000,000 tons of refuse are deposited annually on the 33 refuse dumps supervised by officers of the Department. Three new dumps were opened during the year. Two hundred and sixty six inspections were made and resulted in nine letters of caution being sent to offenders.

The only alteration of major importance in connection with the matter of dumps was the sale, as an industrial site, of a large refuse dump on the Thames side. This area of land included some 250 acres of virgin marsh which had been prescribed for use as a dump for refuse from London Boroughs, and it had been estimated that the life of the dump would have been another 30 years. If land scheduled for disposal of refuse is lost in this way, an equivalent acreage must be found and approved for refuse disposal to obviate possible shortage of land for this purpose.

The refuse dumps are properly levelled at permitted height, consolidated and covered, they do not harbour rats and there are no fires of any consequence.

Attention is drawn to the paper entitled " Large Scale Refuse Disposal by Tipping in Essex " by Mr. S. E. Willis, Assistant County Health Inspector, which appears on page 105 and following.

ATMOSPHERIC POLLUTION

As a result of the endeavours made to secure the co-operation of County District Councils in investigating problems relating to atmospheric pollution the following Councils have agreed to participate, in one form or another, in a scheme for the scientific measurement of atmospheric pollution in Essex, as recommended by the Fuel Research Station at Greenwich :—

Borough Councils

Barking. Chingford, Dagenham, Ilford, Leyton, Maldon, Romford and Walthamstow.

Urban District Councils

Braintree and Bocking, Chigwell, Clacton, Epping, Harlow, Hornchurch, Rayleigh, Thurrock and Witham.

Rural District Councils

Braintree, Chelmsford, Dunmow, Halstead, Lexden and Winstree, Maldon, Rochford and Saffron Walden.

The scheme entails the provision of the necessary instruments, e.g. deposit gauges, lead peroxide instruments or daily instruments.

In order to assist in this work and in the interests of the co-ordination which is desirable, the County Council has made arrangements with the Counties Public Health Laboratories, 66 Victoria Street, London, S.W.1 to enable County District Councils to have samples from the atmospheric pollution instruments analysed at a reduced cost.

RURAL HOUSING

Under Section 88 of the Housing Act, 1936, it is the duty of the County Council to have constant regard to housing conditions in each rural district within the County. Returns furnished by the respective Rural District Councils indicate the extent of their housing activities during the year and the summarised information is as given in the Tables on page 49.

Particulars of slum clearance proposals of the Rural District Councils were included in the Annual Report for 1955. They form a basis on which progress can be assessed from year to year and for such purpose the estimated numbers of houses coming within that category are given at the base of the Table on page 49. It should, perhaps, be mentioned here that such figures are not affected by those in items (vii)—(ix) which are in respect of houses rendered fit for human habitation by repair, etc.

The varying degrees of housing activity are illustrated by the tables and in particular the outstanding progress in this field achieved by the Halstead Rural District Council. In some other cases progress appears to be very slow and a considerable speed-up would seem to be necessary if slum clearance programmes are to be fulfilled.

The returns of the rural authorities also give information as to house building activities within their respective districts which is as summarised in the Table on page 51. Reference to the list of housing applicants in urgent need of re-housing incorporated in this table shows that the demand has not fallen in proportion to development, but has actually considerably increased in two instances.

Advances and guarantees continued to be made by rural authorities under the appropriate Acts. Each local authority participates in varying measure, but there was a general decrease on the figures for 1955. Most advances were made for the acquisition, construction or alteration of premises under the Housing Act 1949.

DWELLING HOUSES DEMOLISHED, CLOSED OR REPAIRED DURING 1956			RURAL DISTRICTS										
			Braintree	*Chelmsford*	*Dunmow*	*Epping & Ongar*	*Halstead*	*Lexden and Winstree*	*Maldon*	*Rochford*	*Saffron Walden*	*Tendring*	TOTALS
Housing Act, 1936	(*i*) No. of dwelling-houses demolished	Unfit houses	—	—	—	6	—	—	—	—	2	—	8
		Other houses	—	—	—	—	—	—	—	—	—	—	—
		No. of persons displaced	—	—	—	3	—	—	1	—	—	5	9
	(*ii*) Houses demolished as a result of formal or informal procedure under Section 11	Houses	30	18	6	11	28	7	12	6	5	15	138
		Persons displaced	33	13	—	25	9	7	50	27	6	48	218
	(*iii*) Houses closed in pursuance of an undertaking given by the owners under Section 11 and still in force	Houses	3	8	2	3	58	12	4	—	9	1	100
		Persons displaced	—	—	1	8	66	23	12	—	33	2	145
	(*iv*) Parts of buildings closed .. .. (Section 12)	Houses	—	—	—	—	—	1	—	—	—	—	1
		Persons displaced	—	—	—	—	—	3	—	—	—	—	3
Housing Act, 1949	(*v*) Closed as a result of closing orders made (Section 3 (1) and 3 (2)) ..	Houses	—	—	—	3	—	—	—	—	3	—	6
		Persons displaced	—	—	—	—	—	—	—	—	7	—	7
Local Government (Misc. Provs) Act, 1952	(*vi*) Closed as a result of closing orders made under Sections 10(1) and 11 (2)	Houses	—	—	—	—	—	—	11	3	—	6	20
		Persons displaced	—	—	—	—	—	—	7	2	—	—	9
Public Health Acts,	(*vii*) Houses in which defects were remedied after service of formal notices	By owners	2	14	3	5	1	1	—	5	—	3	34
		By L.A. in default	—	—	—	—	—	—	—	—	—	1	1
Housing Act 1936	(*viii*) Houses in which defects were remedied after service of formal notice	By owners	—	2	—	10	7	3	2	1	2	—	27
		By L.A. in default	—	—	—	—	—	—	—	—	—	—	—
H. or P.H.A. Acts	(*ix*) Unfit houses rendered fit during the period as a result of informal action by the L.A.		45	71	8	62	96	163	44	40	33	63	625
Housing Repairs and Rents Act, 1954	(*x*) Houses reconstructed, enlarged or improved and demolition orders revoked		2	—	—	—	1	—	—	—	—	—	3
	(*xi*) Houses retained for temporary accommodation and approved for grant (Section 7)		—	—	—	—	—	—	—	—	—	—	—
	(*xii*) Separate dwellings contained in (xi) above ..		—	—	—	—	—	—	—	—	—	—	—
	(*xiii*) Houses licensed for temporary occupation -Section 6)		1	—	4	—	—	—	—	—	—	1	6
Estimated number of houses unfit for human habitation within the meaning of Section 9 of the Housing Repairs and Rents Act, 1954 and suitable only for treatment within categories i—vi above as given in 1955 Slum Clearance Return.			728	147	767	146	510	172	379	218	297	177	3,541

Rural District Council	*No. of houses erected during the year ended 31st December, 1956 (1955 figures are given in parenthesis)*		*No. of applicants on waiting list for Council houses at 31st December, 1956 who are in urgent need of housing accommodation (1955 figures are given in parenthesis)*
	by the Council	*by private enterprise*	
Braintree	29 (36)	32 (50)	520 (498)
Chelmsford	93 (100)	407* (367)*	1,175† (1,265)†
Dunmow	32 (25)	65 (60)	289 (350)
Epping and Ongar	36 (98)	159 (237)	350 (650)
Halstead	42 (83)	22 (28)	150 (120)
Lexden & Winstree....	79 (34)	93 (77)	362‡ (382)
Maldon	— (22)	29 (31)	20 (27)
Rochford	48 (32)	368 (340)	450 (549)‡
Saffron Walden	24 (70)	40 (24)	64 (117)
Tendring	14 (62)	119 (110)	650 (435)

* 40 (48) erected by Housing Associations.
† approximately 750 (800) in urgent need.
‡ not assessed as to degree of urgency.

ESTABLISHMENTS FOR MASSAGE OR SPECIAL TREATMENT

Part IV of the Essex County Council Act 1933 requires that no person shall in a county district in which that Part of the Act is in force, carry on an establishment for massage or special treatment without a licence from the County Council authorising him to do so. During the year eight licences were granted and 82 licences renewed to carry on establishments for massage or special treatment. Officers of the Department made 166 visits in connection with these establishments.

COUNTY AMBULANCE SERVICE

Since the Ambulance Service was established in July, 1948, there has been a substantial increase in the number of calls made on the Service every year, but during 1956 for the first time, notwithstanding a progressive increase in the population of the Administrative County, there was only a slight increase in the total number of patients conveyed and actually a small decrease in the mileage run by the vehicles of the Service. A total of 632,775 patients were conveyed and the mileage run was 4,337,453. These figures, compared with the previous year, show an increase of .7 per cent in patients and a decrease in mileage of .1 per cent. The cost per vehicle mile is 3/- and the cost per person carried is 18/4d.

The continuous demand for ambulance transport in Essex is reflected not only in the statistics showing work done by the directly provided service, but also in the work undertaken by the Home Service Ambulance Committee of the Order of St. John and British Red Cross Society and the Hospital Car Service.

The increasing demand is largely due to the rapid development of out-patient facilities at hospitals due to the need to reduce the number of in-patients to manageable numbers owing to the lack of professional staff and inadequate accommodation. Such facilities as are now available at hospitals for diagnosis and treatment by their nature lead to an increased use of the Ambulance Service for the purpose of transporting patients to and fro. An analysis of the total number of patients carried reveals that 83 per cent were conveyed to and from treatment clinics and out-patient departments ; some 50 per cent of these being physiotherapy patients.

Communications

Radio telephony was introduced into No. 1 Division during the year. The main transmitter receiver for this Division is situated at Lambourne End and is remotely controlled from Ilford. Forty vehicles have been equipped with radio-telephony sets.

Vehicles

In order to gain experience in the use of diesel traction in ambulance vehicles orders have been placed for three diesel-engined ambulances and one diesel-engined sitting case vehicle. Each of the four vehicles is being built by a different firm with a view to obtaining information in regard to alternative methods of construction and materials.

the figures in parenthesis indicating percentage increases on the comparable figures for the previous twelve months :—

Year Ended	*Total Mileage*	*Patients Conveyed*	*Gross Expenditure (actual)*
31.3.1952	3,663,123 (38%)	380,077 (39%)	£380,663 (28%)
31.3.1953	3,869,032 (6%)	491,029 (29%)	£446,920 (17%)
31.3.1954	4,155,465 (7%)	548,520 (11%)	£510,889 (7%)
31.3.1955	4,424,034 (4%)	604,280 (10%)	£546,355 (5%)
31.3.1956	4,488,993 (2%)	635,315 (5%)	£582,762 (7%)

DECENTRALISATION OF ADMINISTRATION

The arrangements for the decentralisation of certain functions under the National Health Service Act 1946 formulated in 1948 functioned very smoothly during the whole of 1956.

Area Medical Officers met in conference three times during the year and discussed, amongst other matters, the possibility of effecting economies in a number of services, immunisation policy, the supervision of the dental service, the care of sick room equipment and the report of the Minister of Health's Working Party on the health visiting service.

INTEGRATION OF THE HEALTH SERVICES

The National Health Service Joint Advisory Committee for Essex met twice during 1956 and again gave consideration to the needs of new towns and housing estates. Other subjects which were discussed included the preliminary arrangements to be made in connection with a cancer education campaign ; and further steps to be taken to ensure an economical use of the County ambulance service.

Excellent relationships were maintained throughout the year with the Regional Hospital Boards and Hospital Management Committees on the one hand and the Executive Council and the Local Medical Committee on the other hand.

OVERSEAS VISITORS

During the year nine different visits were made to the County by health officers from overseas, five of them at the request of the Ministry of Health.

During January, Dr. S. N. Mwathi of the Kenya Medical Department, who had been awarded a World Health Organisation Fellowship, spent four weeks in the County studying public health services with particular reference to rural health.

Dr. M. Payevar, a Medical Officer from Iran, who also had been awarded a World Health Organisation Fellowship, came to Essex for two weeks to study the preventive aspects of maternity and child welfare work.

In order to study administration of the public health services, Dr. Marko Saric, Physician in the Public Health Service, Zagreb, Yugoslavia, holding a Fellowship of the World Health Organisation, visited Essex for three and a half weeks in February and March, his stay being divided between the Central Office of the Health Department and two of the Health Areas.

At the request of the National Association for the Prevention of Tuberculosis, Mr. E. J. Dixon, Health Superintendent-in-Training, Medical Department, Sierra Leone, West Africa, who was in this country as one of the Association's Colonial Scholars, spent two weeks in Essex in April. Visits arranged throughout the County dealt particularly with tuberculosis and sanitation.

Mrs. T. DeLeon, another Colonial Scholar of the National Association for the Prevention of Tuberculosis, a Public Health Nurse from Jamaica, visited two Health Areas during her three weeks stay during June to study public health work with particular reference to the control of tuberculosis.

Two Dental Officers of the Norwegian Public Dental Service, Dr. R. O. Sannarud and Dr. P. O. Pederson, paid a one-day visit to School Dental Surgeries in Essex on 17th July at the request of the Dean of the London Dental School.

Dr. S. Sotto Yuvienco, an obstetrician and gynaecologist from the Phillipines, a World Health Organisation Fellow, paid a visit on 7th August to see something of the County's maternity services.

Dr. G. Coulon, Inspector General of the French Ministry of Health, who was making an official visit of two weeks to this Country under the Brussels Treaty Exchange Scheme, came for two days to observe the health services of the County.

Another Colonial Scholar of the National Association for the Prevention of Tuberculosis, Mr. C. D. Sciberras, a Health Inspector from Malta, paid a visit lasting two weeks, in September to study public health services with particular reference to the prevention of tuberculosis.

CIVIL DEFENCE

The number of volunteers enrolled in the Ambulance and Casualty Collecting Section of the Essex Division of the Civil Defence Corps at 31st December, 1956, was as follows—comparable figures for the end of 1955 being shown in brackets :—

	Men	Women	Total
Eastern Region	446 (433)	.... 731 (768)	.... 1,177 (1,201)
London Region	358 (357)	.... 532 (618)	.... 890 (975)
	804 (790)	.... 1,263 (1,386)	.... 2,067 (2,176)

Following the issue of a revised training syllabus for the Section the training of instructors was proceeded with as quickly as possible in order that the enrolled volunteers could be brought up-to-date as regards their training. To this end, four more officers employed in the Ambulance Service attended instructors' training courses arranged by the Ministry of Health at the Home Office Civil Defence School, Falfield, Gloucestershire, two being successful in gaining " Full " certificates and two " Restricted " certificates. In addition three courses for training local instructors were held at the Corps Headquarters at Danbury Park, near Chelmsford, as a result of which 39 more instructors were successful in qualifying—26 with " Full " certificates and 13 with " Restricted " certificates. Section training according to the new syllabus was therefore in full swing by the early autumn.

Once again only limited progress was made in giving driving instruction to enrolled volunteers who had completed their Basic, First-Aid and Section training. The lack of suitable vehicles continued to be a source of difficulty and although a number of alternatives were explored the difficulties had not been resolved by the end of the year.

SECTION III
CARE OF MOTHERS AND YOUNG CHILDREN

Child Welfare Centres

At the end of the year there were 241 Child Welfare Centres operating in the County as compared with 238 at the end of 1955.

The following changes in the arrangements took place during the year :—

New Centres :

Gt. Bentley : Village Hall.

Chelmsford : St. John Ambulance Brigade Headquarters, 140 Mildmay Road.

Runwell : Parish Hall.

West Thurrock : No. 2 Day Nursery, London Road.

Walthamstow : Winchester Road, Highams Park.

Centres discontinued :

Chelmsford : Jubilee Hall, Roman Road.

Barling : Women's Institute Hall.

The review of existing arrangements and methods at Infant Welfare Centres which was referred to in the report last year is being continued.

Environmental Survey of Leukaemia in Childhood

During the year 1956 it was agreed to co-operate in a nationwide survey of leukaemia, which is sponsored by the General Register Office, the Medical Research Council and the Tata Memorial Trust and is organised by the Department of Social Medicine, Oxford. It was prompted by the observation that during the last 25 years the leukaemia death rate in this country has nearly trebled ; that the social variation shown by leukaemia mortality has been no less than, but quite different from, that shown by infant mortality and that there is an abrupt increase in the risk of death from leukaemia between the ages of one year and three years.

The survey covered England and Wales and was restricted to children under 10 years of age. Three groups of mothers were interviewed :

1. Those of children who had recently died from leukaemia (1953-55).
2. Those of children who had recently died of other malignant disease (1953-55).
3. Those of " controls " i.e. live children matched for age, sex and locality with the cases of leukaemia and other malignant disease.

The object of the interviews was to obtain systematic answers to a number of

questions which might have some bearing on the etiology of leukaemia (e.g. radiation hazards, " sophisticated " foods, hereditary influences, etc.).

In the event, 94 cases and 97 controls were interviewed during the five months from May to September.

A preliminary communication on ' Malignant Disease in Childhood and Diagnostic Irradiation in Utero ' appeared in the medical press in September, 1956.

Co-operation between Hospital Paediatric Departments and Professional Staff of the County Council

The liaison arrangements between the medical and health visiting staff of the County Council and the medical and nursing staffs of the various hospitals serving the County which have existed for several years continued to be of great value both to the staff concerned and to the maintenance of good relations between the local health and the hospital services.

Distribution of Welfare Foods

With a view to meeting the requirements of the general public and having due regard to the present need for economy, the arrangements for the distribution of welfare foods in the County were constantly under review during the year. It became necessary to increase the number of distribution points from 434 to 442. The number of storage depots remained at 47 as in the previous year.

The quantities of welfare foods distributed in Essex during 1955 (estimated) and 1956 were :—

	1955 (*estimated*)	1956
Orange Juice (Vitamin C) bottles....	1,463,504	1,556,108
Vitamins A and D Tablets, packets	86,168	92,520
Cod Liver Oil (Vitamins A and D), bottles	218,620	191,133
National Dried Milk, tins	790,806	762,174

County Medicament and Nutriment Scheme

As in previous years the scheme for the supply of approved medicaments free of charge and of nutriments at reduced prices to mothers and children attending Child Welfare Centres, upon the recommendation of a medical officer, was continued. The approved lists have been reviewed from time to time and, where desirable, additions have been made.

Dental Treatment and Dentures

The report of the Chief Dental Officer on the work of the County Dental

Service appears on page 65. The following table indicates the dental treatment provided for mothers and young children during the years 1955 and 1956.

	Expectant and Nursing Mothers		*Children under 5 years of age*	
	1955	1956	1955	1956
(a) *Numbers provided with dental care*				
Examined	2,286	2,020	3,547	3,819
Needing Treatment	2,073	1,871	3,202	3,379
Treated	1,956	1,717	2,969	2,957
Made dentally fit	1,449	1,265	2,445	2,631
(b) *Forms of dental treatment provided*				
Extractions	3,254	2,945	2,710	2,908
Anaesthetics :				
Local	858	978	231	220
General	725	533	1,314	1,445
Fillings	2,964	2,722	3,356	3,516
Scalings or scaling and gum treatment	897	879	22	22
Silver Nitrate treatment	56	38	1,572	1,176
Dressings	884	826	966	877
Radiographs	95	72	9	4
Dentures provided :				
Complete	201	236	—	—
Partial	245	211	—	—
Crowns and Inlays	5	9	—	—

Specialist Services

During the year variations in the arrangements at specialist clinics staffed by the North-East Metropolitan Regional Hospital Board have been made as follows :—

Sessions transferred—

Orthopaedic Ascertainment
From Halstead Hospital to St. Mary's Hospital, Colchester.

Rheumatism From Newbury Hall, Ilford to the King George Hospital, Ilford.

New Sessions Commenced at Health Services Clinics—

Ophthalmic

Great Wakering	One session every three months.
St. Mary's Lane, Upminster	Two sessions monthly.

Orthopaedic Ascertainment

Dunmow .... One session monthly.

Marks Road, Romford Increased sessions from one monthly to one every four weeks.

Physiotherapy

Dunmow .... One session weekly

Craylands, Basildon One session weekly.

Extensions of the specialist services considered necessary during the financial year 1957/58 were submitted to the North-East Metropolitan Regional Hospital Board, as follows :—

Health Area	*Health Centre/ Health Services Clinic*	*Proposed extension*
South East Essex	High Road, Pitsea	Increase ophthalmic sessions from one to two sessions monthly and provide one orthoptic session monthly.
	Nevenden Road, Wickford	Increase ophthalmic sessions from one to two monthly.
	Craylands, Basildon	Increase ophthalmic sessions from one to two monthly.
	Furtherwick Road, Canvey Island	Increase ophthalmic sessions from one to two monthly.
	Great Wakering	Provide one ophthalmic session monthly.
South Essex	Stifford Long Lane, Grays	Increase physiotherapy sessions from one to two weekly.
Forest	Hatch Lane, Chingford	Increase ophthalmic sessions from four to five monthly.
	Loughton Hall, Debden	Increase ophthalmic sessions from four to five monthly.
	Moot House, Harlow	Increase ophthalmic sessions from three to four monthly and physiotherapy sessions from two to three weekly.
Romford	Marks Road, Romford	Increase ophthalmic sessions from two to four monthly and provide one additional orthopaedic session each two months.
	Gooshays Drive, Harold Hill	Continue two additional temporary ophthalmic sessions monthly.

Day Nurseries

At the beginning of the year 1956 there were 23 day nurseries providing a total accommodation for 1,181 children functioning throughout the County.

At the end of the year the County Council were maintaining 20 day nurseries providing a total accommodation for 1,006 children.

All nurseries are visited from time to time by inspectors from the Ministries of Health and Education, and at the end of the year 15 were approved for the training of nursery students in the care of children 0-5 years.

Owing to the continued increase of costs a revised standard charge was brought into operation as from the beginning of the year, the standard charge being fixed at 8/6d. a day, and 4/3d. for a half day.

Details of attendances at day nurseries were kept under review throughout the year and in consequence the following nurseries were closed and alternative arrangements made for the accommodation of the children :—

Sunshine House Day Nursery (Dr. Barnardo's Home), Ilford—A decline in attendances at this day nursery led to it being closed on 17th May, 1956, the children being transferred to the remaining two day nurseries in the Ilford Health Area. The agreement with Dr. Barnardo's Homes for the tenancy of the premises was terminated.

Eastbury House, Eastbury Square, Ripple Road, Barking—The premises in which this day nursery was accommodated are the property of the National Trust which body asked for their vacation so that they might revert to their former use as a museum. Consequently the day nursery was closed on 12th October, 1956, arrangements being made for the accommodation of the children at the Gale Street Day Nursery, Barking, and for the provision of transport where necessary.

Spratt Hall Road Day Nursery, Wanstead, E.11—As the low attendances at this day nursery had an adverse effect upon its running costs it was considered uneconomical to maintain it. It was accordingly closed on 31st December, 1956. Arrangements were made for seven children (within the priority classes) to attend Ellingham Road Day Nursery, Leyton.

During the year special consideration was given to a request for the provision of day nursery accommodation in Harlow but no conclusion had been reached by the end of the year.

Another matter which was under investigation at the close of the year was the extent to which the present day nursery facilities in the County meet the needs of the child population.

Nurseries and Child Minders Regulation Act 1948

The following table based on information supplied by Area Medical Officers shows the number of premises and child minders registered by the County Council in accordance with the requirements of the Nurseries and Child Minders Regulation Act 1948 and the actual number of children for whom

provision was made at the end of the year, together with comparable figures for the year 1955 :—

Health Area	Nurseries				Child Minders			
	Number Registered		*Number of Children provided for*		*Number Registered*		*Number of Children provided for*	
	1955	1956	1955	1956	1955	1956	1955	1956
North-East Essex	2	2	45	45	—	—	—	—
Mid-Essex	3	3	34	34	1	1	6	6
South-East Essex	—	1	—	9	—	1	—	3
South Essex	5	5	143	149	—	6	—	31
Forest	4	6	56	78	11	14	26	48
Romford	—	—	—	—	—	1	—	6
Barking	—	—	—	—	—	—	—	—
Dagenham	—	—	—	—	3	2	17	12
Ilford	5	4	121	109	3	7	27	45
Leyton	—	—	—	—	1	1	3	3
Walthamstow	—	—	—	—	—	—	—	—
Totals	19	21	399	424	19	33	79	154

Daily Guardians Scheme

The table below shows the number of registered Daily Guardians and the number of children being cared for at the end of 1956 in the Forest, Dagenham and Walthamstow Health Areas of the County where it continues to operate :—

Health Area	*Daily guardians*	*Children being cared for*
Forest	5	1
Dagenham	158	105
Walthamstow	19	5
	182	111

Convalescent Facilities

During the year 142 applications were received for recuperative holidays (46 in respect of mothers and 96 in respect of children). Such holidays were provided in 90 cases (mothers 26 and children 64).

HEALTH VISITING

The number of health visitors, tuberculosis visitors and school nurses employed at the end of 1956 was 220 whole-time and 38 part-time, as compared with 220 and 30 respectively at the end of 1955. Of these, 190 nurses were engaged on health visiting (most of them sharing this with school nursing),

24 were tuberculosis visitors and 44 were employed entirely in the School Health Service. A further 14 whole-time and 31 part-time nurses were engaged in nursing duties at clinics.

The total number of visits paid by health visitors was 337,781, compared with 330,395 in 1955, and 343,314 in 1954. In 43,860 cases when a health visitor called she found a house was empty or was unable for some other reason to contact the person to be visited. The other visits were made to the following:-

Expectant mothers	8,378
Children under 1 year of age	104,166
Children aged 1 and under 2 years	49,894
Children aged 2 and under 5 years	89,137
Tuberculosis households	6,275
Other cases	36,071

Health Visitors include tuberculosis visiting in their duties in rural areas but the majority of the visits to tuberculosis cases is undertaken by tuberculosis visitors (see the section on Tuberculosis for details). Seventy-two per cent of health visitors' visits were to children under 5 years of age and the number of visits paid was equivalent to an average of 4.2 visits to every child under the age of one, and 1.4 visits to every child between one and five.

In addition to visiting the homes of children and others under their care, Health Visitors attend child welfare centres and other types of clinics, and during 1956 they attended 19,422 such sessions in connection with the work of the Local Health Authority. These duties are of course in addition to the clinics and visits paid in connection with the School Health Services.

The health visitor is now well accustomed to that wider sphere of duties for which she is responsible under the National Health Service Act. Many of them attend Tuberculosis After-Care Committees for the purpose of supporting applications for assistance and for giving guidance to the Committee on the social needs of the families concerned.

In the wider sphere of general hospital after-care the co-operation between health visitors and hospital almoners continues to expand.

In order to gain some more specific information on the subject of " other visits " in respect to which no provision is made in official returns, one Health Area (Mid-Essex) has been carrying out a small survey for the past three years. As a result it has been ascertained that of 3,568 care and after-care visits (not including tuberculosis visits) undertaken by 30 health visitors during the year 1956 : 681 were in connection with hospital after care, 1,709 in connection with the care of the aged, 427 related to applications for domestic help and 751 were for other reasons.

CHILDREN ACT 1948

Residential Establishments

The medical arrangements in the Council's residential nurseries and children's homes were continued on the lines previously reported, the routine

medical inspection and the general medical supervision of the children being undertaken by general medical practitioners.

As in previous years visits were paid to four residential nurseries in the County in company with the Children's Officer.

The medical arrangements in the two remand homes at Boyles Court, Great Warley and Newport House, Great Baddow, and the Chafford Approved School at Ramsey have continued unchanged.

Boarded-Out Children

The Boarding Out of Children Regulations 1955, came into operation on the 6th January, 1956. At the request of the Children's Officer arrangements were made for some of the medical examinations of children prior to their being boarded out, and of children under two years of age who were already boarded out, to be undertaken at clinics by Assistant County Medical Officers. The majority of the medical examinations, however, were again made by general medical practitioners.

The number of children examined during 1956 was 911, 246 of them required treatment or follow up for a variety of conditions and details were forwarded to the appropriate Area Medical Officer.

REPORT OF THE CHIEF DENTAL OFFICER

The dental care of expectant and nursing mothers, and of young children not attending school, provided by the Local Health Authority under section 22 of the National Health Service Act is carried out by the dental officers who provide the service for the school children attending the maintained schools of the administrative County. The dental officers devote the equivalent of about one session per whole-time dental officer weekly to the Service. The actual time devoted to this work during the year under review owing to shortage of staff was slightly less than in 1955 and the amount of dental work completed was proportionately less.

During the year 2,020 mothers and 3,819 young children were examined and of these 1,717 and 2,957 respectively were treated. The comparable figures for 1955 were 2,286 mothers, 3,547 children examined with treatment given to 1,956 and 2,969 mothers and children respectively. However the amount of treatment given for each patient shows a further upward trend and the table below shows the work completed per 100 patients treated.

	Expectant and Nursing Mothers				*Pre-School Children*	
	Scalings	*Fillings*	*Extractions*	*Dentures*	*Fillings*	*Extractions*
1950	30	73	174	23	66	110
1955	45	152	166	26	113	91
1956	52	160	173	26	119	96

Ministry of Health Circular 11/55 gave guidance as to the standards of premises and equipment to be reasonably expected in the dental departments of local authorities. These standards are adhered to in all new premises and the task of re-equipping the older centres has been continued. It is difficult to realise the difference between modern purpose-built and adapted premises. More comfort for the patient and more efficient and congenial surroundings for the staff make for better work.

The opportunity for the staff to work up to three evening sessions weekly was granted during the year primarily for the treatment of mothers and the equivalent of one extra dental officer was in this way obtained. It is important that all expectant and nursing mothers be given the opportunity of a dental inspection and treatment and this applies most particularly to patients who are expecting their first baby.

The practice whereby most of the general anaesthetics for dental extractions are administered by Assistant County Medical Officers or visiting General Medical Practitioners continued. During the year eight Assistant County Medical Officers from six Health Areas attended post-graduate courses on general anaesthetics at the Eastman Dental Hospital and in addition three of these visited the dental out-patient department at Guy's Hospital. The part-time consultant anaesthetist from the North-East Metropolitan Regional Hospital Board continued to attend at Walthamstow and his services have now been extended to include Romford.

In accordance with approved arrangements for refresher courses at five-yearly intervals for whole-time dental officers three of these members of the staff attended the Eastman Dental Hospital for a week's course in children's dentistry.

The dental laboratories at Barking and Walthamstow continue to produce the larger proportion of the dentures and appliances needed for mothers and school children. The Walthamstow laboratory covers that area and a proportion of Leyton whilst the Barking laboratory covers South-east and South Essex, Romford, Dagenham, Barking and also the general dental services at Harold Hill and Aveley Health Centres. The remainder of the work is let out to mechanics to the profession. Some alterations in the administration of the Barking laboratory have resulted in a weekly turn-round of work being made available and the bulk buying of certain materials is now undertaken. The following table shows the number of major items produced :—

	Orthodontic appliances	*Dentures—new remade and repaired*
Barking	660	947
Walthamstow	267	606
Private	939	376

Approval in principle has been given to the establishment of a third dental laboratory in the County.

The incidence of dental decay increases but on the other hand it is probable that in 1958 the number of dentists on the register will fall because this is the year when the National Health Service Superannuation Regulations become operative and many dentists may be retiring. Many part-time officers stay only a short time in the service because the more remunerative general practice can grow so rapidly nowadays as to leave no time for County Council service. There were 61 dental officers appointments and resignations during 1956 and this remarkable turnover has its effect on the efficiency of the service. Continuity is needed in the professional and ancillary staffs to get the best results, especially in the treatment of young children.

With the general shortage of dental manpower it is imperative to consider all possible means which may help to relieve the situation, and three of the most important points are modern premises and equipment, dental health education and the fluoridation of water supply.

The importance of reasonable premises and equipment is mentioned earlier in this report.

Dental Health Education is undertaken concurrently with the general programme of Health Education carried on by the department and this is supplemented by the work of oral hygienists who give demonstrations, film shows and talks at schools and child welfare centres. Miss E. M. Knowles, O.B.E., F.D.S., a Senior Dental Officer at the Ministry of Health, visited County Hall in December and talked to dental officers and medical officers on this subject and also spoke to health visitors and dental attendants. The object of this education is to stress the importance and benefits of the practice of oral hygiene.

It has been confirmed to the satisfaction of many observers that where there is a water supply with a fluoride content of about one part per million one may expect to find a much lower incidence and less severe type of dental decay. This is borne out by the examination of Essex children in the naturally occurring high fluoride areas of the County notably at West Mersea (5.8 p.p.m.) and Burnham-on-Crouch (3.5 p.p.m.) and Harwich (2.0 p.p.m.) and comparing them with children from the Saffron Walden district (0.1 p.p.m.). Miss J. Forrest of the Ministry of Health (British Dental Journal volume 100 No. 8) found 24% of the children examined aged 12 to 14 years to be caries-free in West Mersea, 50% in Burnham-on-Crouch and 35% in Harwich. The corresponding figure for Saffron Walden and district was found to be only 4% caries-free. In the United States investigation concerning the value of adding a fluorine salt to the domestic water supply is being carried out on a grand scale. One investigation was started in 1945 with two similar towns, Grand Rapids and Muskegon being selected. The former town had its water supply artificially brought up to 1 p.p.m. fluoride content whilst the water supply of the latter remained at its naturally occurring level of 0.2 p.p.m. A comprehensive report of this investigation is given by the United States Department of Health Education and

Welfare in a Public Health Report of July 1956 and a summary of the report is given below in full :—

"The results of the Grand Rapids-Muskegon study after 10 years of observation indicate that the adjustment of the fluoride content of a communal water to an optimal level (approximately 1 p.p.m. fluoride) will produce the following effects :

1. A striking reduction in the prevalence of dental caries in the deciduous teeth. At the peak of prevalence, namely six years of age, the caries for the deciduous teeth was reduced by about 54 per cent.
2. A marked reduction in the prevalence of dental caries in the permanent teeth. In children born since fluoridation was put into effect, the caries rate for the permanent teeth was reduced on the average by about 60 per cent.
3. Some benefit among persons whose teeth having already formed or erupted when fluoridation begun.
4. No undesirable cosmetic effect from dental fluorosis."

Similar investigations are being carried out in this country by the Ministry of Health.

The report of the Committee on the recruitment to the dental profession (the McNair report), underlines the shortage of dentists and holds out little hope for an early easing of the present state of affairs.

The Dentists Act received the Royal Assent in March, 1956 and became operative on the 4th July. The Act provides for the establishment of a General Dental Council with full disciplinary powers over the profession and with an interest in the education and examination of dental undergraduates. So far as the public dental service is concerned an important part of the new Act requires that an experiment in the training and use of a further class of dental ancillary workers be made. These persons will be trained to fill teeth and to extract deciduous (milk) teeth and will be allowed to work in the National and Local Government Services. A registered dentist will first prescribe the treatment to be carried out. The training of these ancillary workers will probably take about two years so that the results of any experiments will take a considerable time to be apparent.

One of the outstanding things about the dental service is the changing attitude of the public to the value of keeping the natural dentition and the demand for conservation treatment as opposed to extraction. Unfortunately the demand in Essex is beyond the capacity of the service.

Mr. L. W. Elmer who has served the Borough of Walthamstow and the County Council as a Senior Dental Officer since 1952 retired at the end of the year and I would like to wish him many years of happy retirement.

J. BYROM,

Chief Dental Officer.

SECTION IV

MIDWIFERY AND HOME NURSING

The difficulty of recruitment of staff referred to in last year's annual report, became even more acute during the year under review. Advertisements for home nurses and midwives, or for home nurse-midwives have in some instances been repeated over several months without producing a single applicant and this, in spite of the fact that accommodation was in most cases being provided.

In the South Essex Health Area the position gave rise to anxiety. The Area includes districts unattractive in themselves and not very accessible to London. As many as seven vacancies in this area were unfilled at one period, some of them for as long as six months. A breakdown in the service was only averted at the most critical period by seconding midwives from the other Health Areas who volunteered to undertake work away from their own homes. Other Health Areas which had serious staffing difficulties were South East Essex and Forest. In all three Areas there are rapidly growing centres of population.

The staffing situation is not likely to become less difficult in the foreseeable future. Essex has still a considerable nucleus of the former village nurse midwives, who are not State Registered Nurses ; in fact half of the home nurse midwives in Essex are of this type. They settled in the more rural parts of the County after their training in Leytonstone and have given a life time of service. More and more of them are reaching retiring age and it is found that an insufficient proportion of their more highly trained modern counterparts are prepared to settle to a life of district nursing. Although the Training Homes in the County are providing district training for some 30 to 40 nurses each year, only a relatively small number of those trained are still working in the County after two or three years.

It was unfortunate that the long expected Whitley revision of charges for accommodation for domiciliary nurses and midwives should have finally appeared when recruitment to the service was proving so difficult. This revision retrospectively doubled the charge for the single nurse occupying accommodation provided by the County Council and this caused a certain amount of discontent among those nurses affected. While it was recognised that the district nurse and midwife had been in a very favourable position in respect of charges for accommodation compared with her colleagues the revised charges and terms of their implementation made it less likely that the candidate who was wavering, would choose district nursing or domiciliary midwifery.

Indeed the inducement which district work offered to the nurse who has tired of communal life in hospital and who wants to live in her own home, has almost disappeared as more and more hospitals are prepared to accept non-resident staff and even, in some cases, to provide accommodation for nursing staff in flats or individual houses.

The superintendent who is in constant touch with her staff realises the importance of considering the nurse as a person and not simply as a unit of work. Emphasis must be given to this point when staff establishments are being considered so as to ensure that sufficient off-duty is allowed so that the nurse or midwife may have an opportunity to take part in the social activities of the district.

It must be remembered too, that although the hospital nurse may be harder worked when she is on duty, she does have regular off duty, while a district nurse or midwife has to remain " on call " throughout 24 hours for at least five nights out of seven, and that she is therefore committed to a rather isolated life from the social point of view.

Staff shortages increase the difficulties of the Superintendent of Home Nursing, who has to spend her time averting crises and trying to ensure that necessary visits will be paid. In some cases she has to do the nursing herself and is left with insufficient time to view her area as a whole and deal with problems of individual nurses, which if dealt with too late, may lead to a resignation, and a vicious circle develops.

Ante-Natal Care related to Toxeamia of Pregnancy

A further united effort to combat maternal and perinatal mortality by all three branches of the National Health Service was instituted by the Ministry of Health during 1956.

As a result of the communication received from the Ministry of Health thirteen meetings between professional representatives of the three branches of the National Health Service, at which the Department was represented at Central Office and Area level, were held throughout the second half of the year at various points in the County and adjoining areas to consider suggestions for dealing with this matter. At the end of the year a number of meetings had still to take place. When all the meetings have been held and the various reports considered jointly at officer level a report will be submitted to the administrative bodies concerned so that such administrative action as may be found necessary may be taken. It is hoped that a considerable amount of useful action may result.

Even at this stage it can be said that the opportunity provided by the meetings of free discussion and interchange of views between consultant obstetricians, general medical practitioners and members of the local health authority staff has been of value. Misunderstandings have been cleared up and better co-operation is already resulting.

Analgesia

The percentage of women confined at home who received inhalational analgesia rose to 81 in 1956 whilst 50.9 per cent were given pethidine.

By the end of the year twelve Trichloroethylene B.P. machines of the type approved for use by midwives had been obtained and 361 patients had received this analgesic.

Ante-Natal and Post-Natal Clinics

Details of attendances of women at ante- and post-natal clinics during 1956 are shown below :—

	Number of clinics provided at end of year (whether held at Child Welfare Centres or other premises)	Number of sessions now held **per month** at clinics included in Col. (2)		Number of women in attendance		Total number of attendances during the year	
		Medical Officers Sessions	Midwives Sessions (i.e. where no Medical Officer was present)	Number of women who attended during the year	Number of new cases included in Col. (4)	Medical Officers Sessions	Midwives Sessions (i.e. where no Medical Officer was present)
(1)	(2)	(3)		(4)	(5)	(6)	
L.H.A. Clinics— (a) Ante-natal clinics	84	336	164	12,662	10,304	54,590	23,928
(b) Post-natal clinics (Figures in brackets show the number of post-natal attendances at ante-natal clinics which are included in the post-natal figures)	18	39	—	3,456 (1,271)	3,314 (1,185)	4,172 (1,345)	—

Puerperal Pyrexia

Of the 451 cases of puerperal pyrexia notified during the year 46 occurred in domiciliary confinements.

Maternal Deaths

The deaths which were ascribed to pregnancy, childbirth or abortion during the year numbered 12 giving a mortality rate of 0.46 per cent of total births compared with a rate of 0.44 per cent in 1955.

Virus Infection during Pregnancy

None of the cases previously registered was followed up during the year 1956.

Care of Unmarried Mothers and their Babies

The number of girls and women who were admitted to hostels maintained by the Chelmsford Diocesan Moral Welfare Association during 1956 was 313, the average length of stay of each mother being six weeks both before and after confinement.

Further difficulties were experienced by the Association in recruiting staff and it was found necessary to close the Hostel of the Good Shepherd at Colchester for a short period during the year.

HOME NURSING

Cases treated and Visits paid

The total number of cases treated by Home Nurses in 1956 was 29,351, involving 676,483 visits. This is a slight reduction on the figures for the previous year, being 533 fewer cases and 15,719 fewer visits.

The table on page 73 shows the number of cases treated and the visits paid, with percentages of each total in disease groups according to the International List of Diseases and Causes of Death, and also the average number of visits per case in each disease group. The two disease groups comprising diseases of the heart and arteries and pneumonia bronchitis and other diseases of the lung, account respectively for 14 per cent and 11 per cent of cases. Diseases of the central nervous system account for 6 per cent, with malignant and lymphatic neoplasms, infections of the skin and subcutaneous tissues, and senility, all round 5 per cent. When the classification is by total visits paid rather than cases treated, diabetes comes to the top of the list accounting for 19 per cent of all visits, with an average of 118 visits per case against the average for all diseases of 23 visits per case. Diseases of the heart and arteries account for 18 per cent of visits, but the average number of visits per case is only 29, whereas arthritis, rheumatism and other diseases of the bones and joints, which account for only 7 per cent of visits required an average of 49 visits per case.

CASES TREATED AND VISITS PAID BY HOME NURSES, 1956

International List No.	Disease Group	Cases treated		Visits paid		Average Visits per case
		No.	%	No.	%	
001-019	1. Tuberculosis	414	1.4	20,582	3.0	50
020-096	2. Other infectious diseases	253	0.9	2,394	0.4	9
100-138	3. Parasitic diseases	47	0.2	605	0.1	13
140-205	4. Malignant and lymphatic neoplasms	1,496	5.1	42,006	6.2	28
210-239	5. Benign and unspecified neoplasms	101	0.3	2,162	0.3	21
241	6. Asthma	186	0.6	1,909	0.3	10
260	7. Diabetes mellitus	1,090	3.7	128,828	19.0	118
290-293	8. Anaemias	949	3.2	23,675	3.5	25
330-357	9. Diseases of the central nervous system	1,826	6.2	67,181	9.9	37
794	10. Senility	1,424	4.9	41,686	6.2	29
370-398	11. Diseases of the eye and ear	830	2.8	7,378	1.1	9
410-458	12. Diseases of the heart and arteries	4,207	14.3	120,601	17.8	29
460-466*	13. Diseases of the veins	704	2.4	27,720	4.1	39
470-475, 481-483, 510-517	14. Upper Respiratory diseases	1,029	3.5	5,975	0.9	6
480, 490-502, 518-527	15. Pneumonia, bronchitis and other diseases of the lung	3,232	11.0	33,533	5.0	10
530-535	16. Diseases of the teeth and supporting structures	148	0.5	695	0.1	5
540-545	17. Diseases of the stomach and duodenum	65	0.2	977	0.1	15
550-553	18. Appendicitis	96	0.3	982	0.1	10
560-561	19. Hernia of abdominal cavity	44	0.1	833	0.1	19
573.0	20. Constipation	1,375	4.7	4,309	0.6	3
536-539, 570-572, 573.1-587	21. Other diseases of digestive system	457	1.6	5,967	0.9	13
590-614, 616	22. Diseases of the urinary system and male genital organs	465	1.6	11,458	1.7	25
615, N997 (part)	23. Circumcision	83	0.3	493	0.1	6
620-637	24. Diseases of the breast and female genital organs	1,368	4.7	12,669	1.9	9
640-652, 680-689†	25. Complications of pregnancy and the puerperium	539	1.8	4,438	0.7	8
690-698	26. Infections of the skin and subcutaneous tissue	1,596	5.4	13,402	2.0	8
700-716	27. Other diseases of the skin and subcutaneous tissue	244	0.8	5,930	0.9	24
720-738	28. Arthritis, rheumatism and other diseases of the bones and joints	924	3.1	45,540	6.7	49
N800-N996	29. Injuries	1,364	4.6	15,577	2.3	11
	30. Post operative cases (not classified elsewhere)‡	356	1.2	8,633	1.3	24
	31. Preparation for diagnostic investigation	1,312	4.5	2,089	0.3	2
Remainder	32. Other defined and ill-defined diseases	1,055	3.6	14,730	2.2	14
	33. Diseases not specified	72	0.2	1,526	0.2	21
	All diseases	29,351	100.0	676,483	100.0	23

*Including ulcerated legs, whether stated to be varicose or not.

†Including breast abscesses in women between 15 and 45 unless known to be non-maternal.

‡Treatment following colostomy or mastectomy has been classified as ' Malignant and lymphatic neoplasms ' and following other specified operations to the site of the operation.

Type of treatment provided

The table set out below gives the cases treated and visits paid with percentages of each, and the average number of visits per case, divided according to the treatment given. This shows the high proportion of the nurses' time which is spent upon visits for the purpose of giving injections of various kinds. The 41 per cent of visits in which an injection was the only treatment required is related largely to visits to diabetics. Other diseases in which almost all the visits were for injections only are anaemia, and tuberculosis ; in cases of diseases of the heart and arteries about three-quarters of the visits were for injections only. The additional percentage of 4.5 where other treatments are combined with injections is spread over a wide variety of disease groups, the groups mainly affected, in addition to those mentioned, being diseases of the lung, infections of the skin, malignant diseases, and diseases of the bones and joints.

Treatment provided	*Cases treated*		*Visits paid*		*Average visits per case*
	No.	*%*	*No.*	*%*	
1. Injections	11,424	28.9	276,892	40.9	24
2. Injections and dressings	250	0.8	7,724	1.1	31
3. Injections and general care	497	1.7	18,357	2.7	37
4. Injections and blanket baths	96	0.3	4,520	0.7	47
5. Injections and 'other' treatment*	65	0.2	1,399	0.2	22
6. Dressings	2,815	9.6	63,072	9.3	22
7. Dressings and general care	155	0.5	6,997	1.0	45
8. Dressings and 'other' treatment*	64	0.2	2,106	0.3	33
9. Change of pessary	839	2.9	6,106	0.9	7
10. Wash outs, douches, etc.	1,023	3.5	11,788	1.7	12
11. Blanket baths	1,452	4.9	40,939	6.1	28
12. Blanket baths and general care	110	0.4	4,785	0.7	44
13. Enemata	2,581	8.8	7,443	1.1	3
14. Enemata and general care	82	0.3	1,074	0.2	13
15. General care only	6,415	21.9	201,429	29.8	31
16. Other treatment*	972	3.3	16,736	2.5	17
17. Observation and instruction only	482	1.6	4,589	0.7	10
18. Not stated	29	0.1	527	0.1	18
All Treatments	29,351	100.0	676,483	100.0	23

*'Other' treatment includes the administration of medicines, drops, poultices and compresses and the takings of temperature, pulse and respiration.

Ages of patients

The following table gives the percentages of cases treated and visits paid divided according to age and sex :—

Age Group	*Percentage of cases in specified age group*			*Percentage of visits to cases in specified age groups*			*Average number of visits to each case*		
	Males	*Females*	*Total*	*Males*	*Females*	*Total*	*Males*	*Females*	*Total*
0-4	2.3	1.9	4.2	0.7	0.6	1.3	7.0	7.7	7.4
5-14 ...	2.5	2.2	4.7	0.7	0.6	1.3	6.4	6.1	6.3
15-24 ...	1.2	2.5	3.7	0.5	0.9	1.4	10.0	8.3	8.9
25-44	4.1	9.7	13.8	2.3	6.0	8.3	13.0	14.2	13.8
45-64	8.8	13.5	22.3	7.1	15.2	22.3	18.7	25.8	23.0
65-74 ...	8.2	13.8	22.0	8.1	20.5	28.6	22.8	34.2	30.0
75 and over	9.6	19.5	29.1	10.5	26.0	36.5	25.3	30.8	29.0
Not stated	—	0.1	0.1	0.1	0.1	0.2	41.1	34.2	36.2
Total	36.7	63.2	100.0	30.0	69.9	100.0	18.8	25.5	23.0

It shows, as in other years, that in every age group over 14 a considerably larger proportion of women than men is visited. As would be expected in an ageing population more of the nurses' time is spent with old people and the table shows that 51 per cent of cases treated belonged to age groups over 65 years, whilst 65 per cent of visits were to these old people continuing the tendency which has been evident over the last four years. In 1953 only 42 per cent of cases treated and 60 per cent of visits were to people over 65.

TRAINING HOMES

The number of nurses who completed a course of Queen's district training during the year under the Essex County Training Scheme was 35, a decrease of eight in comparison with the 1955 figures. Of these nurses 4 were independent candidates whilst 5 were trained for other Counties.

Food Hygiene Regulations

Arrangements were made in the course of the year for the premises used as Training Homes to be inspected to ascertain whether they conformed to the requirements of the Food Hygiene Regulations 1955.

The Lady Rayleigh Training Home, Leytonstone, the Nurses Home, Abury House, Ilford and the Training Home, York House, Dagenham, all satisfied the requirements of the Regulations but it was necessary to provide and instal a wash hand basin with hot and cold water in the outside lavatory, and a second sink in the kitchen at the Nurses Home, Longbridge Road, Barking, and a refrigerator in the Nurses Home, Porters Avenue, Dagenham, and these works are due to be completed during 1957.

TRAINING OF PUPIL MIDWIVES

During the year, the facilities existing in the County for Part II training of pupil midwives were extended when St. Margaret's Hospital, Epping, received approval from the Central Midwives Board as a Part II training school. Four midwives in the Forest Health Area were approved by the Central Midwives Board as teaching district midwives and the first four pupils successfully completed their training in December. This brought the total of pupil midwives who received Part II midwifery training in Essex during the year up to 93. The distribution of the remaining 89 was 30 in Leytonstone, 29 in Colchester, 22 in Walthamstow and 8 in Dagenham.

REGISTRATION AND INSPECTION OF NURSING HOMES

At the end of 1956 there were 42 Nursing Homes registered by the County Council under Part VI of the Public Health Act 1936. One Home providing two beds for maternity patients was closed during the year and three new Homes providing a total of 20 beds for medical or chronic patients were opened. All the Homes were inspected regularly throughout the year.

AGENCIES FOR THE SUPPLY OF NURSES

The two agencies for the supply of nurses in the area of the County for which the Council is responsible continued to function during the year. They are inspected annually.

SECTION V

PREVENTIVE MEDICINE, CARE AND AFTER-CARE

TUBERCULOSIS

Domiciliary Visits

The very important task of visiting tuberculous patients in their homes to give advice and guidance and, where necessary, to ensure that the contacts in the household attend the chest clinic as and when recommended by the Chest Physicians, is carried out in the more densely populated parts of the County by full time Tuberculosis Visitors and elsewhere by Health Visitors who combine this function with duties referred to in other sections of this report (see page 63). Close co-operation is maintained with Chest Physicians through attendance by all Tuberculosis Visitors and most of the Health Visitors at sessions of chest clinics. Those who do not attend fixed clinic sessions visit chest clinics at regular intervals to discuss the needs and progress of their patients with the Chest Physician.

Summary of Work carried out by Health Visitors/ Tuberculosis Visitors during 1956

Health Area	*No. tuberculous households at* 31.12.56	*Visits to Households*		*Chest Clinic Sessions attended*	
		Tuberculosis Visitors	*Health Visitors*	*Tuberculosis Visitors*	*Health Visitors*
North-East Essex	811	75	922	402	80
Mid-Essex	1,035	—	2,778	—	442
South-East Essex	730	—	1,523	—	203
South Essex	1,899	6,842	810	542	79
Forest	1,812	4,008	167	554	54
Romford	1,172	2,625	—	418	—
Barking	798	2,733	—	222	—
Dagenham	785	3,555	28	367	—
Ilford	1,358	4,700	37	497	—
Leyton	705	2,319	—	350	—
Walthamstow ..	974	368	10	770	—
TOTAL	12,079	27,225	6,275	4,122	858

The total number of patients on chest clinic registers at the end of the year was 12,743 (compared with 12,616 at the end of 1955).

Follow-up of Contacts

To assist the Health and Tuberculosis Visitors in their duty of ensuring the attendance of contacts at chest clinics for examination in accordance with the requirements of the Chest Physician, a contacts register is kept by each Area Medical Officer. The number of contacts examined for the first time during the year was 4,674 (the number of newly notified cases of respiratory tuberculosis during the same period was 848) while those subsequently re-examined numbered 16,024.

Where exposure to risk of infection is exceptional arrangements can be made for child tuberculosis contacts to be boarded out with approved foster parents. Over the last few years the need for these facilities has continued to fall and in 1956 no arrangements of this kind were called for.

Open-Air Shelters

For many years shelters for use in the garden have been loaned to tuberculous patients to enable them not only to sleep alone but to be as much as possible in the open air. Better housing conditions, earlier diagnosis and earlier admission to hospital, together with advances in curative measures have diminished the need for making such provision. This has meant that fewer open-air shelters have been required. During the past five years the number in use has dropped from 49 at the end of 1951 to 21 at the end of 1956.

B.C.G. Vaccination

The arrangements for vaccinating with B.C.G. Mantoux negative contacts of patients suffering from tuberculosis by chest physicians (originally introduced in 1951). were continued. The number of contacts vaccinated indicate that a steady increase has been maintained since 1952, the first complete year, when 898 were vaccinated :—

No. of contacts skin tested	4,302
No. of contacts found negative	2,756
No. of contacts vaccinated	1,989

Towards the end of 1954 the scheme for offering B.C.G. vaccination to school children during the twelve months preceding their fourteenth birthday was introduced. The year 1956 was accordingly the second full year of operation and the following figures show that although the actual number of children vaccinated was more than in 1955 the relative number was very similar.

	1955	1956
No. of children to whom B.C.G. was offered	14,882	19,412
No. of children undergoing tuberculin test:		
Positive result	1,585	1,528
Negative result	6,284	8,408
	7,869	9,936
No. of children who were vaccinated with B.C.G.	6,143	8,183

Tuberculosis Care Associations

There are 17 voluntary Tuberculosis Care Associations now covering the whole of the Administrative County. The total income of all the Care Associations during the year was £13,920. Just under one half of this amount was contributed by the County Council, the remainder being raised by local voluntary effort. The total amount raised voluntarily was nearly £1,000 less than in the previous year.

The County Council's contribution comprised a grant calculated on the basis of £2 per thousand of the population covered by the Associations with up to £20 for petty disbursements and in addition a proportion (calculated on the same basis) of an allocation of £2,900 made by the Licensing of Places of Public Entertainment Committee from the Sunday Cinema Fund.

The total expenditure of all Care Associations during the twelve months ended 30th November, 1956 amounted to £14,310 (compared with £13,880 during the previous year) allocated as follows—Milk and groceries, £8,975 ; Fuel, £465 ; Fares, £790 ; Clothing, Furniture, etc., £909 ; Holidays, Outings, etc., £392 ; Diversional therapy, £56 ; Miscellaneous grants, £1,230 ; Printing, postage and expenses for special fund raising efforts, £1,493.

Occupational Therapy

Two full-time occupational therapists are employed by the County Council, one covering the Ilford and Romford Health Areas and the other the Barking and Dagenham Health Areas. During the year 95 new patients were visited and at the end of the year 53 patients were availing themselves of the facilities provided. Arrangements were made in 1956 for each occupational therapist to be provided with a small motor van. This not only results in an increase in the number of patients visited but also provides a greater variety in the type of work from which patients can choose. Formerly this was limited by the amount of material an occupational therapist could transport by bus or bicycle.

Elsewhere in the County tuberculous patients are able to take part in the diversional occupation facilities provided by the British Red Cross Society. A grant is made to the Society on the basis of an initial payment of 10/- for each patient with an additional payment of 10/- a visit, for providing these facilities. The number of patients who participated in these arrangements during the year was 35.

Extra Nourishment

The County Council provides one pint of milk a day free of charge to tuberculous patients upon the recommendation of a Chest Physician. The total number of patients receiving milk at the end of the year was 1,775 compared with 1,769 in 1955.

Rehabilitation

During the year the County Council assumed responsibility for 11 new patients undergoing rehabilitation at either the Papworth Village Settlement,

Cambridge, or the British Legion Settlement, Preston Hall, Maidstone, and at the end of the year 16 patients were being wholly or partly maintained at these Settlements. In both Settlements there are workshops where patients are instructed in various trades, the County Council becoming responsible for contributing towards the maintenance when the patients are able to undertake at least five or six hours of work a day.

Mass Miniature Radiography

The four mobile mass radiography units which cover parts of the County Council's area (as well as the areas of other local health authorities) continued to hold sessions for the general public and also for factory staffs, mental hospital patients, school leavers and other special groups. Figures for 1956 are not yet available so far as the area of the North-East Metropolitan Regional Hospital Board is concerned but during 1955 visits were made to some 68 different sites in the Administrative County and 52,798 persons (27,783 males and 25,015 females) were x-rayed. The proportion of persons examined who were found to be suffering from active pulmonary tuberculosis varied according to the groups examined, but the average for all groups continued to be about 1.4 per thousand. In July, 1956, the East Anglian Regional Hospital Board's Unit visited Saffron Walden and 2,722 persons were x-rayed (1,429 males and 1,293 females).

Books for Tuberculous Patients

Arrangements exist for patients suffering from tuberculosis who are at home to borrow books from the Hospital Library Service set up by the Joint Committee of the British Red Cross Society and the Order of St. John of Jerusalem. The County Council make a grant of 5/- to the Joint Committee in respect of each patient to whom books are lent. During the year about 2,300 books were lent to 78 patients under this scheme.

Notifications

The number of primary notifications of persons suffering from tuberculosis during the year was 960 compared with 972 in 1955 ; 1,175 in 1954 ; 1,374 in 1953 ; and 1,501 in 1952. Fuller details of the 1956 notifications are given in the following table :—

Formal notifications

Age Period		0-	1-	2-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-	Total (all ages)
Respiratory	Males	1	5	8	8	15	34	56	99	70	75	82	45	11	509
	Females	2	1	7	10	11	54	51	94	56	23	20	8	2	339
Non-Respiratory	Males	2	1	4	7	9	2	4	9	7	4	4	5	—	58
	Females	1	1	3	8	5	9	6	8	4	5	2	—	2	54

Otherwise than by formal notification

Death returns from Local Registrar	Respiratory	Male	41
		Female	18
	Non-Respiratory	Male	3
		Female	3
Death returns from Registrar General (Transferable Deaths)	Respiratory	Male	14
		Female	5
	Non-Respiratory	Male	2
		Female	3
Posthumous Notifications	Respiratory	Male ...	4
		Female	—
	Non-Respiratory	Male	—
		Female	1

Attack and Death Rates

The following table shows the number of primary notifications of tuberculosis and the number of deaths attributed to the disease, together with the annual attack and death rates in quinquennia since 1920 and for individual years since 1952 :—

	Respiratory Tuberculosis				*Non-Respiratory Tuberculosis*				*Tuberculosis (all forms)*			
	Notifications		*Deaths*		*Notifications*		*Deaths*		*Notifications*		*Deaths*	
	No.	*Rate**	*No.*	*Rate**	*No.*	*Rate**	*No.*	*Rate**	*No.*	*Rate**	*No.*	*Rate**
920–24	4,904	1.07	3,212	0.70	1,322	0.29	789	0.17	6,226	1.36	4,001	0.87
925–29	5,626	1.09	3,376	0.65	1,853	0.36	704	0.14	7,479	1.45	4,080	0.79
930–34	6,005	0.97	3,498	0.57	2,122	0.34	705	0.11	8,127	1.32	4,203	0.68
935–39	5,521	0.81	3,015	0.44	1,783	0.26	577	0.08	7,304	1.07	3,592	0.53
940–44	6,507	1.02	3,081	0.48	1,859	0.29	592	0.09	8,366	1.31	3,673	0.58
945–49	6,952	0.95	2,674	0.37	1,381	0.19	404	0.06	8,333	1.14	3,078	0.42
950–54	6,293	0.77	1,448	0.18	879	0.11	174	0.02	7,172	0.88	1,622	0.20
1952	1,335	0.82	250	0.15	166	0.10	30	0.02	1,501	0.93	280	0.17
1953	1,187	0.72	266	0.16	187	0.11	26	0.02	1,374	0.84	292	0.18
1954	1,039	0.62	180	0.11	136	0.08	20	0.01	1,175	0.70	200	0.12
1955	834	0.49	140	0.08	138	0.08	29	0.02	972	0.57	169	0.10
1956	848	0.49	126	0.07	112	0.06	15	0.01	960	0.56	141	0.08

* Annual rate per 1,000 population.

OTHER ILLNESSES

Recuperative Convalescence

Two or three weeks convalescence at a holiday home is provided upon a doctor's recommendation for patients recovering from illness provided the patient does not require any medical or nursing attention. In the past, wherever possible, patients have been sent to the Essex Convalescent Home, Clacton-on-Sea (administered by a voluntary committee), but admission was arranged, when there were special reasons, to other homes. In September, 1956, however, the Essex Convalescent Home was closed thus necessitating the use of facilities offered by other homes. During the year some 60 different convalescent homes were used.

The standard charge of £3 3s. 0d. per week made to the patient (subject to abatement in accordance with the County Council's scales of assessment) was increased during the year to an amount based on the average weekly charge paid by the County Council to the various convalescent homes over a period of six months. The charge at present made to patients is at the rate of £3 18s. 2d. per week.

The total number of patients for whom convalescence was provided was 628, compared with 611 during the previous year.

Loan of Sickroom Equipment

The arrangements for the loan of sickroom equipment to domiciliary patients continued as in previous years. The smaller types of articles such as bed pans, back rests, and air rings are stored at the homes of Home Nurses throughout the County and during the year 1,838 of these articles were loaned to patients. Larger items such as wheel chairs, commodes and mattresses and special articles such as cardiac beds are issued from central and other stores through Area Medical Officers. The number of these articles loaned was 4,190 which is a considerable increase on the previous year's figure of 3,412.

Independent depots are run by the British Red Cross Society and the St. John Ambulance Brigade, both of which organisations co-operate informally with the County Council.

Epileptics and Spastics

The Welfare Committee provide facilities under Part III of the National Assistance Act 1948 for physically handicapped persons including those suffering from epilepsy and cerebral palsy. The services provided are carried out to a great extent through the agency of voluntary bodies with the co-operation of Area Medical Officers and are co-ordinated with the Local Health Services such as the provision of home nursing, domestic help and convalescence and the loan of sickroom equipment.

Towards the end of the year arrangements were being formulated, in accordance with the recommendations of the Minister's Standing Medical Advisory Committee, for improving the facilities for the medical care of epileptics.

The register of handicapped persons which is being compiled on behalf of the Welfare Committee by the Essex Association for the Welfare of the Physically Handicapped now contains particulars of 2,101 patients living at home, of whom 78 are epileptics and 91 are spastics. In addition the Welfare Committee maintain 67 adult epileptics in residential accommodation.

INFECTIOUS DISEASES

Corrected notifications of infectious diseases during 1956 numbered 18,289 compared with 35,466 in 1955 and 16,322 in 1954.

The variation in the numbers is largely due to *measles*. Notifications of this disease numbered 7,241 in 1956 compared with 27,777 in 1955 and 5,655 in 1954.

The below average incidence of *scarlet fever* noted in 1955 when 1,238 cases were notified is again evident in 1956 with a comparable number of 1,265. The average number of cases each year for the years 1950—1954 was 2,694.

Following the epidemic year 1955 when 451 cases of *poliomyelitis* were notified, only 95 cases were reported during 1956. Fifty-three per cent of the notifications were in respect of cases of paralytic poliomyelitis.

Two cases of *diphtheria* were notified, in neither case had the child been immunised. No deaths were recorded.

Notifications of *food poisoning* numbered 607. A comparison of the numbers notified in the last seven years is shown in the following table :—

1950	1951	1952	1953	1954	1955	1956
296	240	371	365	292	466	607

As will be seen the general tendency is for the number of notifications to rise. A possible cause for this may be the increase in communal feeding with the resultant danger of large numbers of people being affected by contaminated food from a single source.

PUBLIC HEALTH (AIRCRAFT) REGULATIONS, 1952

Under the Public Health (Aircraft) Regulations, 1952, the County Council is responsible for certain health control measures at the Stansted Airport, near Saffron Walden. Arrangements exist for four Assistant County Medical Officers to be on call on a rota basis to carry out routine health control.

In December, 1956, it was necessary to augment these arrangements in connection with the arrival by air from Cyprus (over a period of four days) of refugees from the Middle East who were British subjects. Later in the same month similar arrangements were made when a large number of maintenance men from the Suez Canal zone arrived at the airport. On each occasion ambulances staffed and equipped to deal with any emergency were in attendance to deal with the transport of sick people and in addition to the four medical officers, health visitors and other members of the staff attended as required.

VACCINATION

Smallpox

The following table shows the numbers of vaccinations and re-vaccinations against smallpox carried out during 1956 :—

Age at date of vaccination	*Under* 1	1	2-4	5-14	15 *and over*	*Total*
Number vaccinated	11,422	960	710	844	1,306	15,242
Number re-vaccinated	5	9	158	663	3,504	4,339

The 15,242 vaccinations in 1956 compare with 12,616 in 1955, 12,199 in 1954, 10,993 in 1953 and 10,949 in 1952 and the 4,339 re-vaccinations compare with 3,759, 3,731, 3,529 and 3,656 in the same years. The increase both in the number of primary vaccinations and re-vaccinations is encouraging.

The following table shows the numbers of smallpox vaccinations and re-vaccinations carried out in the Health Areas, the infant acceptance rate for 1956 and for 1951-55 and the number of persons per 1,000 of the population who were re-vaccinated.

Health Area	*Number vaccinated*	*Number re-vaccinated*	*Infant Acceptance Rate*		*Re-vaccinations per* 1,000 *population*
			1951-55	1956	
North-East Essex	1,580	460	38.3	46.6	2.4
Mid-Essex	2,203	746	43.5	50.2	3.4
South-East Essex	1,210	146	31.1	39.2	1.1
South Essex	2,581	886	39.6	44.6	3.5
Forest	2,520	690	40.5	53.6	3.0
Romford	931	319	25.3	30.0	2.9
Barking	312	129	19.0	20.5	1.7
Dagenham	773	149	18.9	34.7	1.3
Ilford	1,546	445	41.3	47.7	2.5
Leyton	726	155	26.7	48.4	1.5
Walthamstow	860	214	33.2	49.9	1.8
Administrative County	15,242	4,339	35.1	44.5	2.5

Poliomyelitis

In January, 1956, the Minister of Health announced details of the scheme for vaccination against poliomyelitis. Vaccination was made available on a voluntary basis for all children born between 1947 and 1954 inclusive subject to written parental consent to the vaccination.

Accordingly details of the County Council's arrangements together with consent forms were sent to the parents of all eligible children. The scheme was also made known through advertisements inserted in the local press, by slides at

cinemas, and in some districts by public meetings addressed by Area Medical Officers. Talks were also given to groups of school teachers.

Out of some 220,000 children in the eligible age groups, acceptances were received in respect to 73,666 as follows :—

Sex	*Year of Birth*								*Total (all ages)*
	1947	1948	1949	1950	1951	1952	1953	1954	
Male	7,372	6,403	6,059	5,586	3,487	3,303	3,177	2,721	38,108
Female	6,865	6,092	5,610	5,197	3,244	3,008	2,969	2,573	35,558
Total	14,237	12,495	11,669	10,783	6,731	6,311	6,146	5,294	73,666

In view of the limited quantity of vaccine available it was impossible to vaccinate at once all those children who had been registered. Certain age groups based on month and year of birth were therefore selected by the Ministry of Health for vaccination as each batch of vaccine was released after being subjected to stringent safety tests. The first batch of vaccine was released in May. The course of vaccination consists of two injections of 1 c.c. each. Those children whose injections could not be completed by June were given priority when vaccinations were resumed at the end of November.

The only figures available so far are those relating to children who had completed the full course of injections in May and June as follows :—

Sex	*Year of Birth*								*Total (all ages)*
	1947	1948	1949	1950	1951	1952	1953	1954	
Male	532	428	391	349	500	452	463	375	3,490
Female	548	388	393	340	470	473	426	352	3,390
Total ...	1,080	816	784	689	970	925	889	727	6,880

IMMUNISATION

Diphtheria

During 1956, 23,176 children under 15 years of age completed a full course of immunisation against diphtheria, compared with 16,713 in 1955, 21,461 in 1954 and 18,577 in 1953. The large increase in immunisations carried out during 1956 compared with 1955 is due in part to the prevalence of poliomyelitis in that year, with a resultant postponement of injections until early 1956. In addition a diphtheria immunisation campaign was held in various parts of the County and this in no small measure contributed to the gratifying result.

There were more immunisations in each of the age groups during 1956 than in the previous year. The under-one-year group alone accounts for more than one half of the total immunisations carried out.

Reinforcing injections were given to 19,170 children, compared to 14,748 in 1955 and 18,043 in 1954.

The following table gives the number of children who have at any time received a course of immunisation against diphtheria—immunised either by a primary or reinforcing injection—during the last five years :—

Year of last course of injections (primary or booster)	*Age at 31st December, 1956*				
	Under 1	1–4	5–9	10–14	*Total under* 15
1952–1956	2,994	65,054	78,718	34,367	181,133
1951 or earlier	—	—	46,274	73,087	119,361
Any time	2,994	65,054	124,992	107,454	300,494

In 1956, 63 per cent of children in the 1—4 years age group were immunised and 83 per cent in the 5—14 years age group, compared to 62 per cent and 80 per cent in 1955 and 63 per cent and 82 per cent in 1954. When immunisations in the last five years only are considered, this calculation gives the immunity index. The younger age group remains unaltered but the figure for the older age group is reduced to a little over 40 per cent in 1954. Estimates of population are not available for the 5—9 and 10—14 years age groups and therefore the immunity index for these groups separately cannot be calculated but it is evident, comparing the two sets of figures in the table above, that the level of immunity is considerably higher in the 5—9 years group than that of the 10—14 years group. An approximate estimate would be 54 per cent.

Whooping Cough

Immunisation against whooping cough is carried out at County Council clinics and by general medical practitioners to whom vaccine is supplied free of charge. The total number of children receiving primary immunisation against whooping cough during the year was 11,868, an increase of 9,371 on 1955 but still below the figure of 15,144 in 1954. The number of reinforcing injections given was 1,070 which was a considerable increase on the 1955 figure of 460.

In addition to the arrangements outlined above, many general medical practitioners immunise children with a combined diphtheria-pertussis vaccine. The number of children who received primary immunisation in this way in 1956 was 8,144 compared with 4,799 in 1955. In addition 1,494 received reinforcing injections compared with the 1955 figure of 817.

Despite considerable pressure, both from general medical practitioners and manufacturers of antigens, it has been the policy of the County Council to continue to give separate injections for whooping cough and diphtheria. The reason for the continuance of this policy is the desirability of immunising against whooping cough very early in life (most deaths from the disease take place during the first six months), and because diphtheria injections are best given during the latter part of the first year of life. Whilst great advances have recently been made in the preparation of combined vaccines suitable for administration during the first six months of life, it is advisable to give a booster

lose at the second year which is unnecessary if the primary injection against diphtheria is given during the second six months, and it is by no means easy to arrange for mothers to bring their children to the clinic at two years.

The policy has recently been amply justified for quite another reason as a result of research into the site of paralytic poliomyelitis.

ESSEX EPIDEMIOLOGICAL COMMITTEE

The Essex Epidemiological Committee met on one occasion during 1956. It gave consideration to its terms of reference and decided to amend them with the object of widening the scope of its discussions. The Committee now undertakes " to survey periodically epidemiological problems occurring in the County of Essex and to consider what steps (if any) should be taken to deal with them."

Although vacancies had occurred in the Committee's membership since it last met it was decided that the present membership was adequate for most purposes and no action was therefore taken to fill the vacancies. The present membership is as follows :—

Professor A. Leslie Banks, Professor of Human Ecology, University of Cambridge.

Dr. G. O. Barber, O.B.E., Lecturer in General Practice, St. Mary's Hospital Medical School.

Professor Sir Samuel Bedson, Consultant Adviser in Pathology, Ministry of Health.

Dr. W. H. Bradley, Senior Medical Officer, Ministry of Health.

Dr. W. A. Bullough, C.B.E., Medical Director, Counties Public Health Laboratories.

Dr. F. E. Camps, Reader in Forensic Medicine, University of London at London Hospital Medical College.

Dr. F. R. Dennison, Medical Officer of Health, West Ham.

Dr. John D. Kershaw, Medical Officer of Health, Colchester.

Dr. J. W. Lacey, Consultant Pathologist, Chelmsford Hospitals.

Dr. J. Stevenson Logan, Medical Officer of Health, Southend-on-Sea.

Dr. R. Pilsworth, Director, Public Health Laboratory, Southend-on-Sea.

Dr. Marion Ravell, General Medical Practitioner, Brentwood.

Discussions took place in regard to the general trend in recent years of outbreaks of poliomyelitis and other infectious conditions and in regard to the use of combined vaccines in connection with the County Council's arrangements for immunisation. Among matters considered were proposals for revising the Education Committee's leaflet issued as a result of the revised Memorandum on the Closure of Schools and Exclusion of Children from School issued by the Ministry of Education.

VENEREAL DISEASE

Returns from Special Clinics show that 86 new cases of syphilis and 211 new cases of gonorrhoea were diagnosed in patients residing in Essex during the year. Comparable figures for the last five years are as follows :—

	1951	1952	1953	1954	1955
Syphilis	156	116	137	94	74
Gonorrhoea	242	233	280	213	190

The following table analyses the cases according to the Clinics at which the diagnosis were made :—

Place of Diagnosis	*Syphilis*	*Gonorrhoea*	*Other Conditions*
Essex	54	80	880
London	25	96	848
Elsewhere	7	35	321

The follow-up of persons who were being treated for venereal disease and of those thought to be a source of infection continued to be undertaken, in some parts of the County, by a social worker in the service of the North-East Metropolitan Regional Hospital Board and, in other areas, by senior members of the professional staff of the Department, who attend at the clinics at regular intervals to confer with the venereologist.

HEALTH EDUCATION

Health Education Courses

A one-day course of lectures on " Preventive Dental Health " by Miss E. Knowles, O.B.E., F.D.S., Senior Dental Officer of the Ministry of Health was held at Chelmsford in December, 1956, for the Council's medical, dental and nursing staff. The course was divided into two sessions, the morning session for medical and dental officers, at which 45 doctors and dentists attended, and the afternoon session for 140 health visitors and dental attendants.

Lectures

During the year some 300 lectures were given on varying subjects by the Council's medical, nursing and health education staff, to audiences totalling about 10,000 persons. In addition many courses of lectures were given at schools to senior girls, and to British Red Cross Society Cadets, on " Mothercraft." A series of lectures, lasting throughout the year, was also given to student nursery nurses as part of their training curriculum. In many of the lectures use was made of films and filmstrips.

Mass Radiography

Once again close co-operation was maintained with the Mass Radiography Units of the Regional Hospital Boards covering the County and assistance was continued in the form of the loan of stillographs, installed in convenient shop windows, just prior to and during the visits of the Mass Radiography Units.

Film Shows

During the year some 60 film shows were given throughout the County. Films were hired from the Central Film Library and other sources, but in addition certain films for which there is a greater demand have been purchased by the Department.

Exhibitions

Arrangements were made for special exhibits on specified subjects of particular importance to tour clinics in the County. It is usual for these exhibits to be installed at a clinic for one week at a time and film shows on the particular subject are held during the clinic sessions. During the year the main themes displayed in this way were immunisation and vaccination, clean food and home safety.

A Health Services Exhibition was as usual provided at the County Agricultural Show which in 1956 was held at Orsett. Instead of depicting Health Services provided by the County Council, as in former years, the exhibition was devoted mainly to the circumstances surrounding the discovery of bacteria in water and the effect which this now has on the work of the Health Department in the prevention of illness and disease. A number of stands dealt with exhibits of historical importance. Two other stands dealing with clean milk and clean food also formed part of the exhibition.

Other smaller exhibitions were arranged at a number of clinics and special assistance was given in connection with a Careers Exhibition in Hornchurch and a Road and Home Safety Exhibition in Rayleigh.

Film Strips

There is a constant demand on the Department's library of some 60 filmstrips, and, now that most of the Health Areas have their own filmstrip projectors, some of them have purchased copies of the more frequently use filmstrips.

Health Education in Pregnancy

An increasing number of special lectures and relaxation classes are being given at ante- and post-natal clinics. Four hundred and twenty five such lectures were given by members of the County nursing staff during the year. To assist Area Medical Officers, certain special material is provided such as breast feeding charts, birth atlases, flannelgraphs, dummy foods, and filmstrips, in addition to the film " Childbirth without Fear " (which is shown to selected audiences).

Royal Society for the Prevention of Accidents

The usual annual grant of £13 13s. 0d. was made to the Royal Society for the Prevention of Accidents during the year and use was made from time to time of new materials and posters which the Society supplied.

Central Council for Health Education

The County Council again made an annual grant (on the basis of 11/- per thousand population) to the Central Council for Health Education and use was made of exhibition stands and propaganda material made available by the Central Council.

" Better Health " Magazine

Copies of the monthly magazine " Better Health " were again used as a medium for informing the public of some of the activities of the department by the insertion of a specially printed leaflet. At the end of the year 2,700 copies of this magazine were being distributed each month to libraries, newspapers, schools and clinics throughout the County.

London University Health Education Course

In connection with a training course leading to a Diploma in the Content and Methods of Health Education, arrangements were made, at the request of the University of London Institute of Education, for two students to spend one day a week in the County during term time on practical studies.

DOMESTIC HELP SERVICE

The number of whole-time domestic helps employed in the domestic help service continued to decrease while the number of regular part-time and casual helps increased. As shown by the following table this has been a tendency for some years, experience having shown that in rural areas particularly it is more practicable to employ part-time and casual helps rather than full-time helps owing to variations in the demand for the service.

NUMBER OF DOMESTIC HELPS EMPLOYED 1952-56

	1952	1953	1954	1955	1956
Whole-time helps	81	66	62	45	36
Regular part-time helps	1,511	1,027	953	1,005	1,023
Other helps (casual)		672	962	1,087	1,224
Total	1,592	1,765	1,977	2,137	2,283
Total working on 31st December	1,300	1,476	1,615	1,798	1,926

During 1956 the number of cases provided with domestic help was 12,291, made up of 6,869 new cases and 5,422 cases carried forward from the previous year. The number of new cases helped as shown by the following table was about 3.5 per cent more than in 1955, compared with an increase of 10 per cent in 1955 over 1954 :—

NEW CASES SHOWN BY CATEGORIES HELPED 1952-56

Category	1952	1953	1954	1955	1956
Maternity	2,088	2,057	1,929	1,981	2,146
Acute Sick	925	930	811	879	803
Tuberculosis	197	186	171	154	113
Chronic sick-aged	1,407	1,901	2,085	2,476	2,731
Chronic sick-others	495	620	585	609	734
Aged non-sick	284	280	265	280	227
Others	153	132	185	256	115
All cases	5,549	6,106	6,031	6,635	6,869

It will be seen that the number of new cases helped in all categories apart from chronic sick (aged and others) remained remarkably stable although there was a decrease in the number of new cases of tuberculosis helped. The number of new chronic sick cases over the age of 65 continued to increase and has in fact almost doubled since 1952.

The total number of persons helped and the number of hours worked for cases in each category for the past five years is shown in the following table:—

TOTAL CASES AND HOURS OF HELP PROVIDED
CLASSIFED BY CATEGORIES 1952-56

Category	1952		1953		1954		1955		1956	
	No. of cases	*No. hours provided*	*No. of cases*	*No. hours provided*	*No. of cases*	*No. hours provided*	*No. of cases*	*No. hours provided*	*No. of cases*	*No. hours provided*
Maternity ..	2,175	160,766	2,118	153,823	2,007	138,319	2,044	137,241	2,219	141,478
Acute sick ..	954	55,904	1,024	60,177	893	54,824	971	57,831	923	50,822
Tuberculosis	355	95,292	336	79,537	332	81,465	317	78,478	300	73,036
Chronic sick —aged ..	2,701	567,728	3,686	711,754	4,485	861,120	5,498	998,156	6,564	126,383
Chronic sick others— ..	909	203,927	1,051	210,807	1,104	229,699	1,204	238,830	1,432	267,834
Aged non-sick	664	122,384	648	114,435	691	115,334	728	108,842	694	106,333
Others ..	218	39,834	219	43,726	280	50,023	372	60,980	159	20,830
All cases ..	7,976	1,245,835	9,082	1,374,259	9,792	1,530,784	11,134	1,680,357	12,291	1,786,716

Since 1952, the number of cases helped has increased by just over 50 per cent and the number of hours worked by 43 per cent. That the number of cases

helped has continued to increase at a higher rate than the number of hours worked is in part due to the closer supervision that has been possible following the appointment of additional Area Domestic Help Organisers. At the end of the year there were 18 Area Organisers (although one new post was not filled until early in 1957) and one County Domestic Help Organiser. During the year the numbers of visits paid by Area Organisers were as follows :—

First visits	8,689
Subsequent visits	17,233
Other visits	5,129
	31,051

The results of increased supervision are reflected in the table below which shows a decrease in the average hours per case in all categories except the aged non-sick. In the chronic sick category help provided has again been reduced by an average of 10 hours per case, equivalent to a saving of 80,000 hours during the year.

AVERAGE HOURS PER CASE FOR DIFFERENT CATEGORIES, 1952-56

Category	1952	1953	1954	1955	1956
Maternity	74	73	69	67	64
Acute sick	59	59	61	60	55
Tuberculosis	268	237	245	248	243
Chronic sick—aged	210	193	192	182	172
Chronic sick–others	224	201	208	198	187
Aged non-sick	184	177	167	150	153
Others	183	200	179	164	131
All cases . .	156	151	156	151	145

During the year the County Domestic Help Organiser spent the equivalent of 116 working days in the eleven Health Areas and paid 826 visits to applicants for help and to beneficiaries either in the company of Area Organisers or while acting as holiday or sickness relief.

Three training courses, in which altogether 36 domestic helps participated, were held during the year, one at the Mid-Essex Technical College, Chelmsford, one at the South-West Essex Technical College, Walthamstow, and one at the South-East Essex Technical College, Dagenham. Details of the syllabus of the courses, each of which lasts two weeks, were given in the Annual Report for 1955.

There is still a tendency to look upon domestic helps only as charwomen and to fail to realise their power for good in the home as health educators in the widest sense of the term. In an attempt to dispel this idea it might be useful to record the experience gained as a result of holding the above-mentioned courses for domestic helps in Essex during the past four years.

Ten such courses have now been held, twelve helps attending at each course. Helps are chosen at random from each Health Area in the County, the only criterion being that they must be women who have been in the employment of the Council for a reasonable length of time and so far as can be foreseen are likely to remain in the service. This means of course that the women are a selected group but even so an overall picture of the type of person undertaking the work has been acquired.

No examination is held at the end of the course but the tutors (of whom there are four) and the medical officer who introduces the course have had the responsibility of assessing the capabilities of the helps. The results of these assessments made independently by all concerned have been remarkable. The outstanding factors are the breadth of understanding in most of the women, their capacity for overcoming difficulties and their all-round practical good sense. They are all eager for new ideas which might help them in their work and eager for knowledge particularly on health subjects such as prevention of spread of infection and food values. In fact the tutors have considered that they themselves have benefited from the course by contact with the helps and could be said to have gained almost as much as they have given.

Examples of the type of comment made by tutors are as follows :—

" A very capable, charming student who would be an asset and inspiration in any home. An asset to the course whose frankness regarding present difficulties (no trace of self pity), made the discussion of budgets a most helpful session. Conditions in her own home had made the strictest economy necessary. It was stimulating to see the faith, courage and hard work combining to tackle difficulty and surmounting it. A great pleasure to work with ' one who never turned her back.' "

" A very good student, older than the average but active and capable. Rather quieter than most students but occasionally adding wisdom and results of experience which were extremely valuable to discussions. A student who would inspire confidence in any work which she undertook."

Much more attention should be given to the great value of domestic helps as health educators and social workers in the homes. They go into the homes because their presence is desired, they go in at a time of great need when the soil is ready for the sowing of seeds. Their health education is not theory but practice. Their influence consists of showing a good example and they fully justify the assertion made by Florence Nightingale " Real health education consists not in lecturing to the village women but in working with them."

Night Attendance Service

The Night Attendance Service continues to operate as a result of money

made available from certain funds of a charitable nature. Owing to the need to reduce allocations from these funds it was necessary considerably to curtail the service. The number of new cases attended was 85 compared with 154 new cases in 1955 and in all 798 nights of attendance were provided compared with 2,102 nights in 1955.

PREVENTION OF BREAK-UP OF FAMILIES

Full details were given in the report for 1955 of the arrangements which have been established for preventing the break-up of families. During the year under review, these facilities continued to develop on the following lines :—

The Health Visitor

The main responsibility for keeping in touch with problem families and co-ordinating the services available to them continued to fall upon the health visitor—in numerous instances this has meant regular and time consuming calls upon the personal services of health visitors involving much patient endeavour, occasional successes and many disappointments.

There can be no doubt that in the majority of problem families the causative factors are the ill-health of the mother (often allied with ignorance and inexperience) and the irresponsibility of the father. The father's shortcomings are the most difficult to surmount and reliance has to be placed on indirect contact through the mother.

The Domestic Help

The services of domestic helps continued to be of great value in certain types of problem family, particularly where the mother was a poor housekeeper. The right kind of domestic help, with the support of the Area Domestic Help Organiser, can be of special value in dealing with problem families. She does not lecture the mother but works with her day by day constantly repeating the best method of performing household duties until a habit is formed. The effect of such training on the children also has often been noticed. Facilities are available for providing domestic help (as well as convalescence and rehabilitation) free of charge when this seems advisable, notwithstanding the father's earnings, and use was made of these facilities in a small number of particularly difficult cases where help would have been refused if payment had been required.

In general it may be said that in a particularly difficult field where attempts to assist so often meet with disappointing reactions frustration and even hostility, some encouraging results were achieved which provide hope for the greater success of future efforts to rehabilitate problem families in the special interests of the children.

Rehabilitation and Training

Much thought was given to this question but it was found practicable to send mothers, accompanied by the younger children, to rehabilitation centres in

only three cases. Although it is too early to be certain of any lasting success in these cases, the first results were encouraging. Apart from formal rehabilitation, short-term convalescence for mothers and children (together or separately according to the particular needs) was provided in many cases.

Case Conferences

These were held as required in each Health Area, the Area Medical Officer usually acting as convenor. Representatives of up to a dozen different statutory and voluntary bodies attended the conferences. In some instances the family doctor also attended ; this however was not practicable when a number of problem families with different doctors were discussed but on these occasions it was usually possible to obtain the advice and views of the doctor concerned.

Central Register

A register of problem families was started in each Health Area and it has been found that this is of assistance in keeping trace of families who are frequently on the move.

CHIROPODY

A chiropody service continued to be provided at a number of clinics in the following districts :—

Barking, Brentwood, Chingford, Dagenham, Hornchurch, Laindon, Leyton, Walthamstow and Wanstead.

Attendances during 1956, compared with the two previous years, were as follows :—

	Year	*Men*	*Women*	*Children*	*Total*
Number of new cases treated	1954	1,002	2,969	1,072	5,043
	1955	1,054	3,381	1,144	5,579
	1956	939	2,710	1,087	4,727
Number of attendances	1954	14,308	55,971	5,315	75,594
	1955	16,432	61,934	6,099	84,465
	1956	14,444	56,240	6,194	76,878

There was again heavy pressure to extend chiropody facilities to other districts but this was not possible owing to the policy adopted by the Ministry of Health of not allowing any expansion of the service beyond the position which existed on 5th July, 1948.

A further grant was made (from certain voluntary funds available to the County Council) to the Essex Old People's Welfare Committee to assist local Old People's Organisations to provide their own chiropody services by engaging privately practising chiropodists on a sessional basis.

CANCER ACT 1939

It was not necessary to take any action during the year under Section 4 of the Cancer Act 1939, i.e., regarding the prohibition of certain advertisements offering remedies for treatment of cancer.

FACTORIES ACTS 1937 AND 1948

No action was necessary under Section 126 of the Factories Act 1948 whereby the County Medical Officer of Health is liable in certain circumstances to perform or arrange for the performance of the functions of appointed factory doctors.

NATIONAL ASSISTANCE ACT 1948—PART III

The arrangements for the medical supervision of hostels for the aged on behalf of the Welfare Department were continued and during the year 35 visits were made to hostels by a Senior Medical Officer. Assistant County Health Inspectors made 20 visits to hostels during the year for the purpose of reporting upon the purity of water supply, in the course of which 22 samples were taken.

Over the years, and during the course of inspections, three points have been noted which have been the subject of discussion with the County Welfare Officer.

Firstly, observation seems to show that feebleness and infirmity among many of the cases newly admitted to hostels are increasing. Added to this is the fact that existing residents are gradually becoming, with increasing age, more and more incapable. The result is that many of them have to spend occasional days in bed, quite apart from the longer periods spent in bed during the winter months as a result of minor illnesses. This is an added strain on the wardens and attendants, more especially because of the attention required at night. Consideration has been given to this matter and night staff have been provided in some of the larger hostels.

Secondly, many of the old people, after they have been admitted to a hostel, seem to spend most of their time just sitting. It is understandable that, especially so far as women are concerned, they feel ' lost ' when they are no longer able to carry out the manifold household duties to which they have been accustomed all their lives.

The wardens have tried to interest them in some form of occupational therapy, not always successfully. It is felt that success in this matter depends on the end result of the work having an obvious utility value so that the old people are conscious of the contribution which they are still able to make. Following consultation with the County Welfare Officer, a pilot scheme has been started in one of the hostels whereby an occupational therapist teaches the residents to make articles which will be used in the hostel.

Thirdly, emphasis continues to be placed on the prevention of spread of minor infections (e.g. the common cold). To achieve this more and more use should be made of the isolation facilities provided.

Welfare of the Blind and Partially Sighted

The County Welfare Officer has kindly supplied the following information in regard to the welfare of the blind :—

During 1956, there were 370 persons registered as blind and 189 as partially sighted after examination by the ophthalmic specialist.

The total number of blind persons on the register at the end of 1956 was 3,110 being 1,281 males and 1,829 females. The age groups of these are as follows :—

	Under 16	16-20	21-30	31-39	40-49	50-59	60-64	65-69	70 & over	Total
Male	46	19	47	72	105	171	122	122	577	1,281
Female	42	15	39	46	90	186	136	162	1,113	1,829
Total	88	34	86	118	195	357	258	284	1,690	3,110

The partially sighted register shows a total of 791 being 314 males and 477 females in age groups as follows :—

	Under 16	16-20	21-49	50-64	65 *and over*	*Total*
Male	44	26	74	37	133	314
Female	39	14	62	70	292	477
Total	83	40	136	107	425	791

Partially sighted persons in employment total 155.

During the year 610 Forms B.D.8 were completed in respect of new cases including 32 defective sighted and 19 cases not eligible for registration and, in addition, 563 re-examinations were carried out by ophthalmic specialists. The results of these examinations were as follows :—

Blindness	567
Partial sightedness	470
Defective sightedness	108
Not eligible for registration	28
Total	1,173

The following table shows the information obtained in following up all new cases where treatment was recommended on Form B.D.8 :—

	Cause of Disability			
	Cataract	*Glaucoma*	*Retrolental Fibroplasia*	*Others*
New cases only—				
(i) Number of cases registered during the year in respect of which Section F of Form B.D.8 recommends :—				
(*a*) No treatment	75	9	—	186
(*b*) Treatment ..... (Medical, surgical or optical)	117	47	—	167
	104	46	—	149
(ii) Number of cases at (i) (*b*) above which on follow-up action have received treatment				
(Cases refused operative treatment)	11	—	—	1
(Condition not amenable to treatment)	5	1	—	42

In all cases of cataract and glaucoma where the examining ophthalmologist has made a recommendation for treatment a letter has been addressed to the patient's family doctor informing him of the findings and the recommendation of the ophthalmologist. At the same time it is indicated that unless and until operative treatment has been carried out there is not likely to be a change in registration which would justify the County Council in arranging a re-examination.

If and when the operative treatment has been undertaken however a re-examination is arranged and the medical practitioner concerned is notified of the result. If the ophthalmologist recommends a re-examination for medical reasons the family doctor is asked to arrange this under the National Health Service.

Ophthalmia Neonatorum

Information obtained from Area Medical Officers indicated that 46 cases of ophthalmia neonatorum were notified during the year 1956 as compared with only 18 cases in the year before. Vision was unimpaired in all cases.

SECTION VI—THE MENTAL HEALTH SERVICE

Administration

During 1956 the Mental Health Sub-Committee again met on seven occasions.

The establishment of Duly Authorised Officers remained at 24. To ensure a more even distribution of work the responsibility for the Urban District of Harlow was transferred from the Walthamstow office to the Saffron Walden Office at the end of the year.

The vacant post of Psychiatric Social Worker was re-advertised during the year but no applications were received from qualified staff and at the end of the year the post still remained vacant.

Co-operation with the two Regional Hospital Boards and the Hospital Management Committees concerned with the residential care of mental defectives and persons suffering from mental illness was maintained and continued to be extremely satisfactory as in previous years.

The advice of Dr. R. M. Bates, the Physician Superintendent of the Royal Eastern Counties Hospital, Colchester, who acts as the Consultant Adviser in Mental Deficiency in connection with the ascertainment of border line mental defectives and the disposal of other difficult cases again proved to be of great value.

The National Association for Mental Health, the Guardianship Society, Hove, and other voluntary associations and private individuals provided valuable assistance in connection with temporary accommodation for mental defectives.

Work undertaken in the Community

The following table shows the total number of visits paid by the Duly Authorised Officers during the year and shows an increase of nearly 1,500 over the figures for 1955 :—

Mental Deficiency Acts	*Visits*
New cases	534
Statutory supervision	11,186
Voluntary supervision	2,298
Case notes	68
Licence cases	649
Home circumstances reports for visitors....	706
Guardianship cases	304
Holiday, licence and discharge applications	453

Lunacy Acts—	*Visits*
Preliminary investigations	2,847
Sections 14 and 17 (Certified)	1,033
Section 11 (Urgency Orders)	324
Section 20 (Detention for not more than three days)	637
Section 21 (14 days orders)	1

Mental Treatment Acts	*Visits*
Section 1 (Voluntary)	602
Section 5 (Temporary)	83
Inventories prepared	48
Other visits	4,689
	26,462

Lunancy and Mental Treatment Acts

During the year patients suffering from mental illness were admitted to mental hospitals as follows :—

	With the assistance of the Duly Authorised Officers.	Without such assistance.
Lunancy Act 1890—		
Section 11 (Urgency orders)	151	—
Sections 14 and 16 (Certified)	648	—
Section 20 (Detention for not more than 3 days)	185	—
Mental Treatment Act—		
Section 1 (Voluntary)	190	1,315
Section 5 (Temporary)	58	—

The assistance which has been received from time to time from both the County and Metropolitan Police Forces in dealing with the more difficult cases is again gratefully acknowledged.

Mental Deficiency Acts 1913-38

The following table shows the number of patients who were ascertained under the Mental Deficiency Acts during the year, together with particulars as to their disposal :—

	Under Age 16		*Aged* 16 *and over*	
	M	F	M	F
Particulars of cases reported during 1956—				
(*a*) Cases at 31st December ascertained to be defectives "subject to be dealt with." Action taken on reports by—				
(i) Local Education Authorities on children—				
(1) While at school or liable to attend school	48	41	—	—
(2) On leaving special schools	34	18	—	—
(3) On leaving ordinary schools	15	12	—	—
(ii) Police or by Courts	—	—	3	—
(iii) Other sources	10	11	3	6
(*b*) Cases reported but not regarded at 31st December as defectives "subject to be dealt with" on any ground	3	3	19	26
(*c*) Cases reported but not regarded as defectives and thus excluded from (*a*) and (*b*)	8	1	2	2
(*d*) Cases reported in which action was incomplete at 31st December, 1956 and are thus excluded from (*a*) or (*b*)	13	10	—	—
Total number of cases reported during the year	131	96	27	34
Disposal of cases—				
(*a*) Of the cases ascertained to be defectives "subject to be dealt with" under				
(i) Placed under Statutory Supervision	105	79	3	6
(ii) Placed under Guardianship	—	—	—	—
(iii) Taken to "Places of Safety"	—	—	—	—
(iv) Admitted to Hospitals	1	3	3	—
(*b*) Of the cases not ascertained to be defectives "subject to be dealt with" number—				
(i) Placed under Voluntary Supervision	3	3	19	26
(ii) Action unnecessary	—	—	—	—
(*c*) Cases reported who removed from the area or died before disposal was arranged	1	—	—	—
Total of Item 2	110	85	25	32

On the 31st December, 1956, the total number of patients ascertained as "subject to be dealt with" was as follows :—

	Under Age 16 years		*Aged 16 years and over*	
	M	*F*	*M*	*F*
Placed under Statutory Supervision	391	281	800	686
Placed under Guardianship	4	11	17	27
Taken to "Places of Safety"	—	—	—	—
Admitted to Institutions	112	78	666	583
Totals	507	370	1,483	1,296

In addition there are in the community 1,824 defectives who are under voluntary supervision.

Ninety-three orders were obtained during the year detaining patients in institutions or under guardianship and an additional six orders were made by Magistrates Courts or by the Secretary of State under Sections 8 or 9 of the Mental Deficiency Act 1913 respectively. Five patients were also placed in hospitals by their parents or guardians under Section 3, the County Council assisting them in the formalities.

During the year one boy and one girl were returned to the educational system and are now attending suitable schools.

Occupational Centres

The additional Occupation Centre at Clacton-on-Sea referred to in last year's report opened in November, 1956. This was somewhat later than had been envisaged, the delay being due to difficulties which were encountered in hiring suitable accommodation. At the present time there are 16 names on the register and a coach is hired for the conveyance of the majority of the patients to and from their homes. It is hoped that additional patients will attend as time goes on.

Approval was also given in principle to the provision of further centres in Braintree and Saffron Walden.

A review was undertaken of the number of mental defectives in the County under the age of 16 years who were suitable to attend a Junior Occupation Centre and an estimate was prepared of the anticipated number of such patients who would be resident in the County in 1971. From this it appeared that the existing and proposed centres were reasonably well sited to cater for present needs but that it would be necessary in due course to provide centres in the new towns of Basildon and Harlow. Arrangements were therefore made to reserve sites for this purpose.

At the end of 1956 the total number of patients on the register of the Centres was 652 compared with 601 a year earlier.

The policy of improving facilities at existing Centres continued and the following were among the major works carried out.

At Grays electric storage and convector heaters were installed to provide better heating. Revised terms of hiring which provided a longer security of tenure were agreed with the landlords of the Dagenham Junior Occupation Centre which resulted in improved heating arrangements and re-decoration of the premises. Negotiations are proceeding with a view to settling a further tenancy agreement in respect of the Ilford Senior Occupation Centre subject to which it is proposed to re-decorate the Centre and provide better and more extensive sanitary accommodation. Minor improvements were also carried out at the Walthamstow Senior Occupation Centre.

As a result of the Food Hygiene Regulations 1955 which came into force on the 1st January, 1956, arrangements were made for Occupation Centres to be visited with a view to ascertaining whether or not any improvements were necessary to ensure compliance with the Regulations. At one Occupation Centre which is held in premises belonging to the Council no work was necessary but at the other Centres certain deficiencies were found although in some cases these were of a minor nature.

Coach guides were appointed at the Chelmsford Junior Occupation Centre and this enabled arrangements to be made for the Centre to open and close at the same time as the other Centres. Approval was also obtained to the provision of additional transport at the Colchester Junior Occupation Centre in order to ease the difficulties which some parents who lived in the town were experiencing in arranging for their children's attendance.

During the year about 20 patients were transferred from the Dagenham to the Barking Junior Occupation Centre to avoid overcrowding at the former. To enable the increased numbers in attendance to be satisfactorily cared for additional staff were appointed at the Chelmsford, Grays and Loughton Junior and Walthamstow Senior Occupation Centres. It was also agreed that the staff establishment of Centres with more than 60 names on the register and a full-time staff of five or more should include a post of Senior Assistant Supervisor or Senior Assistant Instructor. At the end of the year such posts were created at the Barking, Chelmsford, Grays, Ilford, Leyton and Loughton Junior and Ilford Senior Occupation Centres.

In September, 1956, it was agreed that the charge for the mid-day meal provided at the Centres should be reduced to 4d. a day for children under 11 years of age and 5d. a day for those over 11 years. Previously all children under 16 years of age paid 7d. a day. It was also decided that if a member of the same household as a patient attending a centre was entitled to a free dinner at school no charge should be made to the patient in respect of meals provided at the centre.

As from September, 1956, the Ministry of Health decided not to continue to be responsible for the cost of providing one-third of a pint of milk each day to certain patients who attended Occupation Centres and consequently the County Council agreed that this amount of milk should be provided free of charge to each patient under the age of 16 years who was in attendance.

Short Term care of Mental Defectives

Short term care was provided for 124 mental defectives whose parents for various reasons were unable to look after them.

Institutional Accommodation

Additional accommodation became available for children during the year at South Ockenden Hospital and of the 104 Essex patients admitted to hospitals during the year 45 under the age of 16 years were accommodated at this Hospital.

At the end of the year the total number of names remaining on the list amounted to 308 compared with 345 at the end of 1955.

Prevention of Illness—Care and After-Care

Pending the appointment of a Psychiatric Social Worker the administration of the Goodwill Social Club at Ilford is being undertaken by one of the Duly Authorised Officers.

Largely owing to his efforts and the assistance which he has received from his colleagues the club has continued to prosper. In 1955 the attendances dropped considerably but have now risen again and about 20 patients are present each week. A very pleasant atmosphere prevails in the club and many members who were initially very withdrawn are now willing to partake in the games and social activities provided for them. It is extremely gratifying to see how they can be persuaded to assert themselves and obtain pleasure in team work and party games.

Social after care for other patients who request it is provided by the Duly Authorised Officers and the Committee continued to be responsible for the attendance of a number of patients at other social clubs and at a rehabilitation centre provided by a voluntary organisation.

National Assistance Act 1948

The Duly Authorised Officers continue to provide advice and assistance for mentally handicapped persons under arrangements made with the Welfare Department although there has not been any great demand for this service.

APPENDIX

LARGE SCALE REFUSE DISPOSAL BY CONTROLLED TIPPING IN ESSEX

by

S. E. Willis, Assistant County Health Inspector, Essex County Council.

" I do not hesitate to say that the reeking masses at South Hornchurch taken together comprise the worst refuse dump in Britain and by far the biggest." Those were the words used by the late Mr. J. C. Dawes, the Inspector of Public Cleansing, Ministry of Health in his excellent report dated February, 1929, on the general question of public cleansing in London.

The passing of the Metropolis Management Act, 1855, which brought into existence local services including public cleansing in London did not appear to have produced satisfactory results as in October, 1894, their Medical Officer reported to the London County Council that the arrangements for collecting refuse were defective and that there were in existence some unsatisfactory " dust yards " in which house refuse was sorted or manipulated. Since then the practice of sending refuse out of London has been greatly extended and strong complaints were sent to the Ministry by County Councils and Local Authorities and they were urged to promote legislation which would enable a local authority to prohibit the deposit within its area of house and other refuse brought from the district of another Authority. In June, 1922, the Ministry convened a conference and as a result the well known list of precautionary measures calculated to abate and prevent nuisance in connection with dumps to which they could be made applicable (it was made quite clear that many of the existing dumps were quite beyond their scope) was drawn up and a circular sent to all those authorities affected in the Greater London Area. After 1922 the complaints to the Ministry increased in number and strength and in June, 1925, the Minister decided that Mr. Dawes should conduct an investigation and report upon the public cleansing service in London and the problems connected therewith.

The investigation commenced in 1925 and Mr. Dawes found that, " Generally speaking, the disposal of London refuse is definitely unsatisfactory, and in many instances could scarcely be worse."

The serious position regarding the dumps in Essex was well known as in 1911, Dr. J. C. Thresh, the then County Medical Officer, made a special report to the County Council in which he gave a detailed statement of the circumstances and noted the difficulty of dealing with the problem under existing legislation.

When the first County Health Inspector (Mr. A. Marsh, M.B.E.), was appointed in 1919, one of his duties was to carry out a complete survey and to formulate suggestions for methods to secure improvements. Dr. W. A Bullough, the County Medical Officer in his annual reports between 1919 and 1931 referred to the many complaints received and the unsatisfactory conditions.

The publication of the Dawes Report resulted in the appointment of a representative committee to consider the question of giving effect to the report and eventually when the County Council were promoting a private bill, the opportunity was taken to include provisions to control refuse dumps and the under-mentioned requirements are now in force :—

THE ESSEX COUNTY COUNCIL ACT 1933

The principal object of the sections of the Act relating to refuse dumps was to ensure that the large dumps on the north bank of the Thames which receive London's refuse would be conducted properly, and when completed would fit in with the normal contours of the area. The Act lays down controls as to siting, the height to which refuse can be deposited and the methods to be used, but it only applies to deposits of refuse in the area of a Local Authority, if the refuse is brought in from another area.

Definition

" Refuse " means trade refuse, house refuse, filth, rubbish, dust or other like matter.

Siting

There are four separate methods of controlling the siting of the dumps.

1. When the Act was passed a number of firms were already dumping and a map of their existing sites was included in the Act. These contractors are " protected firms " in that these sites can be used to receive refuse for all time, or until completely filled to the height above O.D. laid down by the Act.

2. Any authority, body or person may apply to the County Council and the Local Authority for any area to be " prescribed " as an area for dumping refuse. Since the passing of the Act no further land has been prescribed.

3. The applicant may apply to the County Council and the Local Authority for permission to tip on land. Following consultation with the County Planning Department a report is submitted to the County Health Committee and if there is no objection from the Local Authority the area is approved and the applicant can dump under either of the methods laid down in the Act.

4. The applicants may give 14 days notice to the County Council and Local Authority of their intention to form a deposit of refuse on any land within the County, but they may then only dump under the more stringent of the methods laid down. This is a most useful means of control and is employed in connection with disused clay and gravel pits and other sites away from the marshes after planning permission has been obtained.

Methods

Two methods are laid down in the Third Schedule to the Act, Part I and Part II, and these are summarised in the Appendix "A" to this article.

Enforcement

If a satisfactory standard is not maintained enforcement action can be taken under the Essex County Council Act 1933, and in some cases under the Town and Country Planning Act 1947.

QUANTITIES RECEIVED AND METHODS OF OPERATION

It is difficult to obtain accurate figures for the amount of refuse received annually by the contractors from London as it is towed down the river by diesel driven tugs in covered and battened barges of five different sizes but the total amount dealt with annually under the Essex County Council Act is undoubtedly over 1,000,000 tons. It might assist the imagination to comprehend this vast quantity of rubbish if I again quote from the Dawes report. On page 6 he says, " assuming that it were possible carefully to stack the refuse on the Horse Guards Parade, which comprises $4\frac{3}{4}$ acres, the solid pile would rise to a uniform height of over 500 ft., or over three times the height of Nelson's Column." Mr. Dawes was referring to 1,202,000 tons of refuse and I do not think that our total of house and trade refuse is far under that figure.

There are a total of 33 refuse dumps of which 6 are major ones. The largest receives over 300,000 tons a year from 12 London Boroughs and has three unloading jetties with eight cranes.

Development of the Marsh

After unloading by cranes which have grabs picking up from three to seven cu. yards at a time (some of the electric cranes are believed to be amongst the best on the Thames side) the rubbish is put into wagons or lorries on the concreted and screened jetties. Development of the dump depends on which method of transport is used as the working faces may be anything up to a mile away from the loading point.

(a) **Using locomotives.** Rubbish should first be formed in a 6′ consolidated and covered layer along one edge of the available bank to the furthest point keeping the line of the bank free from sharp bends. A second layer enables the full permitted height to be reached. The light or heavy gauge rails should be laid near the edge (the heavy gauge can be nearly on the edge) and the side tipping wagons used to form a single 6′ layer 15 yards wide, consolidated and covered as it proceeds to the furthest point. A second layer is then put on top of this to form the finished surface. The marsh being 7′-8′ O.D. the two 6′ covered layers raise it to the permitted 20′ O.D. In one instance where the permitted finished level is 25′ O.D. a third layer is formed. The lines are then slewed in sections to the new edge and the work continues. The maintenance cost of this type of transport is probably less than lorries but may be offset by the gang which has to be available to slew the rails and occasionally to get the train back onto the rails. Until recently at least three men were employed at the working face to tip the wagons but the new five cu. yards metal self cleansing and self centering hopper type wagons can be operated by one man. Usually there are nine wagons to a train on the 4′ $8\frac{1}{2}$″ gauge track.

(b) **Using lorries.** The main difficulty when using lorries is preventing them getting bogged down in wet weather whilst passing over the finished dump loaded with refuse being transported from the jetty to the working face which is anything up to a mile away. The marsh concerned must therefore be developed by depositing, consolidating and covering a 6′ layer of refuse about 100′ wide so as to form a pilot road from the jetty to the furthest point passing right through the centre of the available marsh. A second similar layer must then be formed on top of the first in order to bring the pilot road to its permitted height of 20′ O.D. Any hard core available should of course be put on the top surface. For the first 8 years during the winter refuse should be deposited so that there is as short a run from the jetty as possible but in the summer months the pilot road can be used as required. After 8 years the pilot road can be levelled and provided with a reinforced concrete surface. This work can be carried out in sections as the dump develops.

Transport

As already mentioned refuse is conveyed from the jetty to the working face by two methods.

(a) **Locomotives.** The heavy gauge line is preferable and the 9 wagons forming each train are hauled by an 18 ton 4 cylinder diesel shunting engine, the best type of wagon I have seen being the 5 cu. yards metal hopper which is easily tipped and deposits all the contents.

In one instance the light gauge lines are in use but although they are easier to slew, the weight is not widely distributed, and the track constantly requires attention. The modern tendency is to discard this type of transport.

(b) **Lorries.** Six wheeled preferably with twin rear tyres and with a carrying capacity of some 30 cu. yards (body approximately 14′ x $8\frac{1}{2}$′ x $6\frac{3}{4}$′ ht.) are used. Half track vehicles are no longer obtained as in the winter they badly cut up the surface of the dump. The modern lorries are rear tipping and have a ground to under body clearance of 4′ 9″. With the working face about half a mile away from the jetty and using a reinforced concrete road, the number of lorries required would be about the rate of one for each barge emptied daily. Owing to the different sizes of the barges and the variation in the refuse from the different Boroughs it would be unwise to state a figure for the number of journeys required to empty a barge.

Spreading and Consolidating

By persuasion we have got the contractors to accept the principle of one working face—one bulldozer. International models T.D. 18 or T.D.14 are usually employed and weigh approximately 14 and 10 tons respectively. Large heavy machines of this type are essential to ensure good consolidation and easy spreading of the refuse in 6′ layers. Single cylinder diesels are not satisfactory to deal with such a large tonnage.

Covering

As will be seen from the attached Appendix "A" not more than 100 square yards or 500 square yards (according to which part of the 3rd Schedule is applicable) of open face is allowed at any one time. Covering takes place by two methods.

(a) Working face served by locomotives. A mobile drag-line stands on the consolidated and levelled surface and covers it with 9″ of marsh soil taken by a $\frac{3}{4}$ cu. yd. scoop from near the side of the face. The small type of machine (Cub) with a $\frac{1}{4}$ cu. yd. scoop is useless as it cannot keep up with the rate of tipping. The Essex marshes have a surface of very heavy clay which in its wet state looks very good for covering but as it dries out it cracks badly and is therefore not ideal for its purpose until it has weathered. A bulldozer spreads and consolidates the cover.

(b) Working face served by lorries. The modern practice is to have a scraper with 7—12 cu. yards capacity operating on each face. This machine is drawn by a large bulldozer which in an emergency, can be used to level and consolidate the refuse. Subject to satisfactory trial holes, refuse which has been deposited for 6 years or more can be used as cover. After this time only china, glass, rubber and thicker iron (crushed old oil drums) remain and the mould is in my opinion ideal for covering purposes. It is easily handled in both dry and wet state and compresses to form a good tight surface over which lorries can travel freely during the summer, and for short distances slowly in wet weather. The scraper scoops up the suitable old refuse, takes it to the working face and spreads it as cover. The Act states that the cover shall be 9 ins. thick and that is the instruction given although in many cases the thickness is probably only 6 ins. but the results are satisfactory. The bulldozer consolidates the cover, and the constant movement of the heavy vehicles helps to consolidate the refuse underneath. It is usual to have a dragline and lorry available as a standby in case of any mechanical breakdown.

Levels

The ordnance datum of the virgin marsh is usually 7—8 ft. (Liverpool) and the finished levels after dumping are 20′ or 25′ in accordance with the Act. Levels are taken from checked temporary bench marks on the dumps each summer of the refuse deposited during the preceding twelve months, and any high points are later removed and the area again covered. To assist the contractors the correct finished level is marked on posts driven in ground not filled, with the result that we have very little trouble in ensuring that the permitted height is not exceeded. As the areas subside they are re-filled and covered as required unless cultivated.

Temperatures

The activities of thermogenic and thermophilic aerobic bacteria cause a rise in the temperature of the refuse beneath the covering material as they break it down to simpler substances. Experiments indicate the peak temperatures may

be reached between 9 and 15 days after deposit and return to normal in 116—140 days. The peak temperatures vary considerably as they depend on the amount of organic material in the particular portion of the dump.

On one occasion it was necessary to use old refuse deposited for more than 15 years for cover, and the drag-line excavated some 17 ft. In one part of the hole at about 16′ deep although having the appearance of mould, the old refuse steamed and became hot as it was exposed to the air.

The temperature rise probably destroys most pathogenic organisms which may have gained access to the rubbish and also prevents extensive fly breeding and rat infestation.

Fires

Occasionally, when the covers are removed from the barges, it is found that the refuse which has been loaded some 24 hours is smouldering and this is easily dealt with by using river water.

Fires on the tip are these days rare and are usually caused by small boys setting alight to the open face during the evening. Night watchmen are employed on large dumps but they cannot be looking after the cranes and machinery and the working face some distance away at the same time. To prevent spontaneous combustion quantities of sawdust and similar material are well distributed over the face. When a dump is on fire it is of little use to merely pump water over it as experience has shown that even when this is done thoroughly, and there is no evidence of fire on the surface, some small portion has been missed with the result that as air replaces the water in the refuse, in a few days the fire is much worse than it was before. A fire is dealt with directly the first wisp of smoke is seen by bulldozing the area down to the marsh, spreading and crushing out the fire, and then recovering and re-consolidating the area. If disturbing the burning refuse should produce flames these are controlled by pumps and the bulldozing on to the marsh continues. It is interesting to find that one of the old dumps 90′ high is still on fire although it was last used over 25 years ago.

Flies and Rats

As previously stated the rise in temperature prevents extensive fly breeding and rat infestation. I have been associated with these dumps since 1938, and have only twice seen a rat near the working face. In one instance the whole gang was chasing it over the marsh, and on the other occasion it had been killed. Occasionally rat holes may be found in the soft ground near the concreted jetty. Such holes are dealt with by twisting the largest bulldozer on them or poison and gas if under a hut.

Salvage

A certain amount of totting takes place by the men working on the dumps.

It mainly consists of non-ferrous metals and woollen goods and brings the men in about an average of 30/-d. each per week.

In order to recover scrap metal from the refuse before it is taken to the working face a special plant was installed at one of the jetties. The refuse was lifted by crane from the barge into a large hopper from which it fell on to a moving belt which passed under powerful magnets. Scrap was then passed to trucks for transport elsewhere, and the remaining refuse was taken to the tip. Many difficulties were experienced and the experiment was not the success hoped for. The large plant could deal with only 100 tons of refuse a day and the metal extracted probably did not exceed 10 tons a week. The costly installation has now been sold as scrap metal.

Employees

There may be many cranes serving one working face. Each quick action crane requires a driver ; two men are employed in the barge being unloaded in order to uncover, unbatten, move the rubbish so that it can be picked up by the grab when the barge is becoming empty, and sweep out and disinfect the barge, before it commences its return journey. One man per crane works on the jetty cleaning up.

If lorries are used the working face may require one man to direct the lorries, etc., a bulldozer driver, and the driver of the bulldozer drawing the scraper. In the case of loco served working faces there is a bulldozer driver, an operator of the mobile dragline, and a number of men as required to tip the type of wagons used, and to slew the rails. Two men keep the track clean of fallen rubbish. This is a thankless task usually operated on a rota system.

In some instances the foreman has a clerk and there is also the machinery maintenance staff.

Difficulties

(1) Tides. In many instances the jetties can only be used by the barges for an hour each side of high tide. As the tide goes out the barges are left on the mud. The procedure is for barges being brought from London to be moored away from the jetties and the empty barges removed and replaced by full ones at the appropriate state of the tide. It only needs a hold-up of the tug through fog or other causes to complicate the normal working of the dump.

(2) Fog. Particularly during November when the amount of refuse to be disposed of is at its maximum there are hold-ups through fog. The refuse accumulates at the London end and cannot be brought down the Thames to the dumps where the men are idle. When the fog clears, the amount of refuse received for the next two or three days is very great and if care is not taken, covering, cleaning the jetties, etc. is unsatisfactory.

(3) Strikes. There have never been strike difficulties on the dumps themselves as the men are paid in excess of the Trade Union rates but strikes

of the lighterage men stop the water transport of refuse. In one instance the contractors licensed the 30 cubic yard lorries normally conveying the refuse from the jetty to the working face. By using them for 24 hours a day on three eight hour shifts they kept the dumps going and prevented serious accumulations of refuse at the wharfs of the London Boroughs with whom they held contracts. As the result of these lighterage strikes some of the contractors were impressed by the possibility of taking all refuse from London to the dumps by road.

(4) Mechanisation. As already stated the refuse dumps are very highly mechanised and breakdown of any equipment and the delay obtaining spare parts has caused difficulties. Bearing in mind the cost of large bulldozers, the drag-lines, scrapers, etc., the contractors are unwilling to have as much spare equipment as I would like standing by in case of a breakdown. In the past there has been a tendency for the equipment to be too light for its purpose and this particularly applies to the single cylinder diesel type of small bulldozer which is quite inadequate for dumps of this size. The contractors have now realised the necessity for really heavy equipment.

(5) Absenteeism. The wages on the dumps vary to a surprising degree particularly when piece work rates are paid. Very high wages result in some instances in absenteeism particularly when the dumps are operating on Sundays. The conditions during the winter when the refuse has to be deposited irrespective of weather are severe and although gumboots and oil skins are supplied, as the men get older they suffer from rheumatism which results in a heavy loss of man hours.

(6) Over-loaded vehicles. Particularly where there is piece work this is a constant source of trouble but applies chiefly to railway wagons. The drivers of the cranes are liable to over-fill them with the result that as they proceed to the working face refuse drops by the side of the track and a strong wind will blow away paper. Covering the wagons would not be a practicable proposition and the difficulties in connection with over-loading are steadily lessening as the changeover proceeds from rail transport to lorry transport between the jetties and the working faces.

(7) Wind. The dumps are very exposed and the strength of the wind on the East Coast is well known. Good screens are required at the jetties to prevent paper blowing about and also at the working face when the direction of the wind is away from the face. We are fortunate that the prevailing wind during the winter is from the north east which is more or less into the open working face but portable screens which need be only some 3ft. high are provided where necessary in the form of hurdles or wire to prevent material blowing away before it can be covered.

Final Use

Much of the extensive acreage already allocated to refuse disposal on the marshes will no doubt finally be used for agricultural purposes and at the

present moment some crops are being grown. In one instance wheat was tried but there was a very dry spring and the lack of tilth permitted the ground to dry out too quickly and the crop was not a success. On the other hand, crops of mustard have been grown with satisfactory results. On one of the dumps a number of peach trees have been planted, but it is too early yet to know whether the results will be as good as anticipated. Rye grass is grown for seed and a comparatively small area was planted with asparagus but there has not yet been sufficient time for a good bed to be established. The Ford Works at Dagenham were built on an old refuse dump and a large gas works is being erected on another old site. It is anticipated that as the ground is cultivated and suitable manures added it will become good arable land instead of the rough marsh grazing on which the dumps were sited.

One large dump including an unused prescribed area has recently been sold to a petroleum company for use as an industrial site.

Flooding has been prevented and sea walls strengthened by the existing arrangements.

Future Sites

Disposal takes place on the marshes so that the O.D. of 7′-8′ is raised to 20′ or 25′. As a rough yardstick an average crane will unload sufficient refuse per annum to fill four/five acres and at present there are some 1,900 acres of virgin marsh already approved, and it should be ensured that this land is not used for any other purpose otherwise there may arise a shortage of contractors and land readily available for the disposal of London's refuse. There are still large areas of suitable marsh particularly in the Fobbing district although dredging of the Thames may be necessary before they are assessible to the barges. If eventually approved these areas would last for a considerable number of years.

The six major dumps situated on the marshes and receiving London refuse have a total of approximately 2,854 acres prescribed, 930 acres of which have been totally or partially filled.

A considerable amount of refuse is also produced in Metropolitan Essex. Large County Boroughs and Boroughs use dumps controlled by the Act, and although it is surprising how quickly they fill up large disused gravel pits, etc. there are still three clay pits with an estimated total capacity for 7½ million tons of rubbish as well as other excavations. The Essex Development Plan allocated over a thousand acres of land in the south west part of the County for use as mineral workings, and although each application will have to be dealt with on its merits there is little doubt that many of these areas will afterwards be made up with domestic or trade refuse.

Future commitments and tendencies

It is not anticipated that there will be any noticeable falling off in quantity of domestic and trade refuse being received from London and it is understood that the British Electricity Authority are seeking sites for the disposal of over

870,000 cubic yards of clinker ash and pulverised fuel ash per annum. To this total can be added the ash which will be produced by the new generating stations to be constructed by the British Electricity Authority on the Thames side. The one now under construction at Tilbury may produce about 100,000 cubic yards a year and presumably that to be erected in the West Thurrock Area will have an output on a similar scale.

Some large Boroughs in Metropolitan Essex are having difficulty in finding sites on which to dispose of their refuse by controlled tipping and as their present sites become full will have to transport their refuse greater distances and into the areas of other local authorities. At present there are dumps operated jointly by various Boroughs. Collection vehicles convey the refuse to suitable points where it is loaded into large covered transport lorries with a capacity of up to 40 cubic yards and is thus transported to refuse dumps mostly in disused gravel pits.

Owing to the vast quantities of refuse dealt with it has not been a practicable proposition to carry out composting with sewage sludge and I do not think that this will be a practicable proposition for a long time to come, but better use may be made eventually of Thames dredgings which are at present deposited on one refuse dump or taken out to sea. In due course disposal of radio active waste may become a problem and guidance will be required.

As the finished area of the dumps proceeds from the jetties across the marshes the cost of disposal steadily increases. It may eventually be found to be more economical to transport the refuse by road or rail than by barge as at present, and it is probable that eventually refuse will be brought from London by road and deposited near to the northern perimeter of the sites so that the dumps develop in a southerly direction and eventually link up with the present finished areas.

Wet Pits

In an article of this nature it is only possible to touch briefly on various items, but I feel it would be incomplete without some reference to disposal of refuse in water. As will be seen from Appendix "A" under the provisions of the Essex County Council Act so far as practicable no layer shall be deposited in water unless due to rain or similar causes.

At some wet pits dealing with selected trade wastes only, clean earth and builders waste with plaster board extracted is deposited into water and then other materials are then dumped above the level of the ground water.

The danger from wet pits depends on the geology of each site, and if it is sand and gravel over a thick layer of London clay the organic and chemical content of the ground water may be localised. On the other hand, if the pits are in fissured chalk or limestone pollution could travel some distance in a short time. Suitable wet pits will be used for the disposal to a higher level than the water table, of pulverised fuel as from the British Electricity Authority and care will be taken that there is no dust nuisance. Above this level the pits will probably be used for the disposal of domestic refuse.

If water becomes polluted by refuse it appears black in bulk and smells strongly of hydrogen sulphide produced by sulphate reducing bacteria. The remedy is dilution or efficient aeration, or acid treatment, and it may be that chromate, available as an industrial waste, may be of value. Experiments in this connection are being carried out by the Chemical Research Laboratory of the Department of Scientific and Industrial Research at Teddington. It is interesting to find that a sample of the liquid continually draining from domestic refuse deposited over 15 years ago had an extremely high content of ammoniacal nitrogen (190 p.p.m.) and the polluting character was also shown by the albuminoid nitrogen (17 p.p.m.) and the oxygen absorbed (278 p.p.m. at 4 hours and 94 p.p.m. at 3 minutes). The Biochemical Oxygen Demand was comparatively low (50 p.p.m. 5 days at 18.3°C). The saline constituents and colour were also very high.

From a bacteriological point of view the fluid compares favourably with sewage effluents.

In concluding, I think that it can be claimed that refuse disposal is one of the lesser known industries of Essex.

APPENDIX "A"

Extract from Third Schedule Essex County Council Act 1933

PART I (Summarised)

The deposit shall be made in horizontal layers not more than 6 ft. in thickness and each layer shall be covered on all surfaces with 9″ of earth or other suitable incombustible material which will pack closely.

At no time shall more than 100 sq. yards of refuse be exposed and no refuse may be left exposed for more than 24 hours from the time of deposit.

Each layer shall be allowed to settle before the next layer is added, and the refuse must remain covered so long as it is putrescible.

So far as practicable no layer shall be deposited in water unless due to rain or similar cause, and all reasonable precautions must be taken to prevent fires, breeding of flies and vermin.

Sufficient screens to be provided to prevent paper blowing about, and all steps taken to secure that no tins, and refuse are left exposed on the site (jetty, rail-track, etc.).

Any layer consisting mainly of fish, animal or other organic refuse, shall be covered with at least 2 ft. of earth.

PART II (Summarised)

The deposit shall be made in horizontal *or inclined* layers not more than 6 ft. in thickness and each layer covered with 9″ of earth, etc.

No inclined layer shall exceed 10 ft. in height measured vertically, but if the deposit is adjoining the sea wall or within tidal limits, the layer may be 15 ft. high, measured vertically.

At no time shall more than 500 sq. yards of refuse be exposed and no refuse may be left exposed longer than 48 hours from the time of deposit, save in exceptional circumstances beyond the control of the contractor (e.g. fog). From May to September, refuse must all be covered at the weekend.

The conditions mentioned under Part I also apply as to settlement, deposit in water, prevention of fires, flies and vermin ; provision of screens ; general tidiness, and the extra cover for fish, animal or other organic refuse.

It will be seen that Part I is similar to the suggested precautions laid down by the Ministry of Health in 1922. Part II is an adaptation of Part I to cope with the special problem and an attempt to fit in with previous practice of the more enterprising contractors.

APPENDIX "B"

National Health Service Acts, 1946 to 1952

New Proposals providing for the modification of existing Proposals made by the Essex County Council for carrying out their functions under Section 26 of the National Health Service Act 1946, as amended.

In Part II of the proposed arrangements formulated by the Essex County Council for carrying out their functions under Section 26 of the Act of 1946 relating to Vaccination against Smallpox and Immunisation against Diphtheria as modified and approved by the Minister of Health, add the following paragraph to the section headed " IMMUNISATION AGAINST OTHER DISEASES " :—

" C. Other Diseases

The Council propose also to make arrangements for offering to persons in their area or to any groups of such persons, vaccination or immunisation against any other disease in respect of which authority is sought from or given by the Minister. The Council's Medical Officer of Health will be responsible for keeping records directed towards assessing the value of any such form of vaccination or immunisation."

TABLE I—BIRTHS, DEATHS, ANNUAL RATES ETC., 1956

Health Area and County District	Estimated Population 1955	Estimated Population 1956	Migration	Live Births No.	Live Births Rate*(1955)		Still Births No.	Still Births Rate†(1955)		Infant Deaths No.	Infant Deaths Rate‡(1955)		Deaths at all Ages No.	Deaths at all Ages Rate*(1955)	
Colchester B.	63,090	61,880	−1,383	970	15.7		20	20		16	16		797	12.9	
Harwich B.	15,310	15,090	− 335	260	17.2		7	26		6	23		145	9.6	
Brightlingsea U.	4,580	4,600	+ 42	55	11.9		2	35		2	36		77	16.7	
Clacton U.	24,280	24,670	+ 501	261	10.6		4	15		5	19		372	15.1	
Frinton and Walton U.	8,410	8,580	+ 214	71	8.3		1	14		1	14		115	13.4	
Halstead U.	6,360	6,340	− 4	82	12.9		3	35		1	12		98	15.4	
West Mersea U.	3,030	3,060	+ 32	39	12.7		2	49		—	—		41	13.4	
Wivenhoe U.	2,550	2,550	+ 3	37	14.5		—	—		1	27		40	15.7	
Halstead R.	16,650	16,550	− 101	228	13.8		4	17		3	13		227	13.7	
Lexden and Winstree R.	22,350	22,320	+ 16	264	11.8		6	22		5	19		310	13.9	
Tendring R.	24,520	24,560	+ 99	332	13.5		2	6		7	21		391	15.9	
1. North-East Essex	191,130	190,200	− 916	2,599	13.7	13.0	51	19.2	25.1	47	18.1	27.8	2,613	13.7	13.1
Chelmsford B.	40,420	41,420	+ 739	690	16.6		8	11		17	25		429	10.3	
Maldon B.	9,810	9,820	− 46	161	16.4		3	18		3	19		105	10.7	
Saffron Walden B.	7,240	7,340	+ 145	113	15.4		3	26		4	35		158	21.5	
Braintree and Bocking U.	18,020	18,250	+ 107	305	16.7		9	29		5	16		182	10.0	
Burnham-on-Crouch U.	3,840	3,840	− 3	50	13.0		1	20		—	—		47	12.2	
Witham U.	8,790	8,840	+ 18	134	15.1		—	—		2	15		102	11.5	
Braintree R.	19,880	20,150	+ 166	334	16.6		4	12		4	12		230	11.4	
Chelmsford R.	40,180	41,090	+ 729	680	16.5		17	24		15	22		499	12.1	
Dunmow R.	19,420	19,610	+ 67	332	16.9		5	15		9	27		209	10.6	
Maldon R.	15,100	15,050	− 57	228	15.1		2	9		6	26		221	14.7	
Saffron Walden R.	18,450	18,540	+ 3	287	15.5		6	20		13	45		200	10.8	
Epping and Ongar R. (East)	16,320	16,640		Total Figures for Epping and Ongar R.D. given below.											
2. Mid-Essex	217,470	220,590	+1,868	3,314	16.2	15.5	58	17.2	21.8	78	23.5	22.6	2,382	11.6	11.4
Basildon U.	54,270	59,560	+4,571	1,335	22.4		21	15		25	19		616	10.3	
Benfleet U.	21,490	23,250	+1,720	339	14.6		10	29		11	32		299	12.9	
Canvey Island U.	12,040	12,190	+ 116	184	15.1		2	11		6	33		150	12.3	
Rayleigh U.	11,490	13,220	+1,686	190	14.4		2	10		6	31		146	11.0	
Rochford R.	21,310	22,650	+1,317	332	14.6		8	23		4	12		309	13.6	
3. South-East Essex	120,600	130,870	+9,410	2,380	18.2	16.8	43	17.7	18.4	52	21.8	22.7	1,520	11.6	11.7
Brentwood U.	38,040	41,030	+2,833	639	15.6		11	17		12	19		482	11.7	
Hornchurch U.	110,900	113,600	+2,027	1,967	17.3		33	16		43	22		1,294	11.4	
Thurrock U.	100,900	101,400	− 508	1,842	18.2		33	18		48	26		834	8.2	
4. South Essex	249,840	256,030	+4,352	4,448	17.4	16.4	77	17.0	22.6	103	23.1	19.8	2,610	10.2	9.4
Chingford B.	47,310	46,840	− 570	492	10.5		6	12		5	10		392	8.4	
Wanstead and Woodford B.	61,380	61,130	− 202	677	11.1		10	14		18	26		725	11.8	
Chigwell U.	58,790	59,740	+ 542	789	13.2		17	21		10	13		381	6.4	
Epping U.	7,380	7,940	+ 506	136	17.1		6	42		2	15		82	10.3	
Harlow U.	24,660	29,830	+4,335	982	32.9		21	21		23	23		147	4.9	
Waltham Holy Cross U.	9,430	10,030	+ 490	185	18.4		6	31		1	5		75	7.5	
Epping and Ongar R. (West)	15,320	15,640		Total Figures for Epping and Ongar R.D. given below.											
5. Forest	224,270	231,150	+5,101	3,261	15.1	15.0	66	19.8	19.2	59	18.1	16.9	1,802	8.4	8.0
Epping and Ongar R.D.	31,640	32,280	+ 376	577	17.9		12	20		4	7		313	9.7	
6. Romford	107,800	110,100	+1,121	1,901	17.3	17.7	49	25.1	23.5	42	22.1	23.0	722	6.5	6.5
7. Barking	75,990	75,560	− 701	919	12.2	12.9	23	24.4	29.7	18	19.6	24.5	648	8.6	8.8
8. Dagenham	115,600	115,100	−1,246	1,581	13.8	13.0	35	21.6	23.4	33	20.9	29.3	835	7.2	6.9
9. Ilford	181,700	180,600	−1,129	2,115	11.7	11.6	43	19.9	22.8	33	15.6	20.0	2,086	11.5	11.5
10. Leyton	102,000	100,900	− 989	1,185	11.7	11.1	25	20.7	13.0	27	22.8	24.6	1,296	12.8	12.3
11. Walthamstow	117,800	116,700	−1,293	1,388	11.9	11.1	25	17.7	18.3	26	18.7	20.6	1,195	10.2	10.1
Administrative County	1,704,200	1,727,800	+15,954	25,668	14.8		507	19.4		522	20.3		18,022	10.4	
Administrative County 1955	1,704,200		+24,615	24,290	14.3		538	21.7		538	22.1		17,205	10.1	

* Per 1,000 estimated population. † Per 1,000 total births. ‡ Per 1,000 live births.

TABLE II — CAUSES OF DEATH BY AGE, 1956

	Male									Female								
	0—	1—	5—	15—	25—	45—	65—	75—	*Total*	0—	1—	5—	15—	25—	45—	65—	75	*Total*
1. Tuberculosis—respiratory	1	—	—	—	16	40	26	9	92	—	—	—	1	15	11	4	3	34
2. Tuberculosis—other	—	—	—	—	2	7	2	—	11	—	—	1	—	—	2	1	—	4
3. Syphilitic disease	—	—	—	—	1	8	15	9	33	—	—	—	—	1	7	6	2	16
4. Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5. Whooping cough	1	—	—	—	—	—	—	—	1	2	—	—	—	—	—	—	—	2
6. Meningococcal infections	1	1	—	—	—	—	—	—	2	2	1	2	—	—	—	—	—	5
7. Acute poliomyelitis	—	—	2	1	1	—	—	—	4	1	1	—	—	—	—	—	—	2
8. Measles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9. Other infective and parasitic diseases	1	—	—	—	5	10	—	2	18	—	1	—	—	1	9	1	—	12
10. Malignant neoplasm, stomach	—	—	—	—	8	100	105	67	280	—	—	—	—	4	40	71	97	212
11. Malignant neoplasm, lung and bronchus	—	—	—	—	27	328	198	78	631	—	—	—	1	6	45	41	31	124
12. Malignant neoplasm, breast	—	—	—	—	—	—	—	2	2	—	—	—	—	33	158	74	71	336
13. Malignant neoplasm, uterus	—	—	—	—	—	—	—	—	—	—	—	—	—	15	46	30	28	119
14. Other malignant and lymphatic neoplasms	2	3	8	8	39	274	253	262	849	1	7	4	7	49	266	210	238	782
15. Leukaemia and Aleukaemia	—	3	6	7	6	17	9	9	57	1	2	5	1	6	12	14	8	49
16. Diabetes	—	1	—	—	7	6	17	21	52	—	—	—	—	3	15	30	26	74
17. Vascular Lesions of nervous system	—	—	—	2	19	182	330	524	1,057	—	1	1	—	20	203	379	799	1,403
18. Coronary disease, angina	—	—	—	—	54	617	537	463	1,671	—	—	—	—	5	143	347	487	982
19. Hypertension with heart disease	—	—	—	—	2	39	71	76	188	—	—	—	—	2	33	82	154	271
20. Other heart disease	1	1	1	2	25	116	235	693	1,074	—	—	1	1	33	142	284	1,141	1,602
21. Other circulatory disease	—	—	1	1	9	85	121	170	387	—	—	—	—	11	52	106	239	408
22. Influenza	—	—	—	—	3	10	13	28	54	—	—	1	—	—	8	3	31	43
23. Pneumonia	37	7	6	—	11	62	98	209	430	36	4	2	—	8	27	82	279	438
24. Bronchitis	6	1	1	—	7	192	227	271	705	2	2	1	—	2	43	69	227	346
25. Other diseases of respiratory system	—	2	—	—	3	40	25	28	98	3	—	2	1	3	12	12	25	58
26. Ulcer of stomach and duodenum	—	—	—	—	9	48	40	57	154	—	—	—	—	1	12	27	27	67
27. Gastritis, enteritis and diarrhoea	6	—	—	—	5	4	8	5	28	3	—	—	—	5	5	12	19	44
28. Nephritis and nephrosis	—	—	3	7	11	40	13	10	84	—	—	—	2	8	18	12	20	60
29. Hyperplasia of prostrate	—	—	—	—	—	9	21	80	110	—	—	—	—	—	—	—	—	—
30. Pregnancy, childbirth, abortion	—	—	—	—	—	—	—	—	—	—	—	—	2	9	—	—	1	12
31. Congenital malformations	51	7	4	4	4	14	1	2	87	51	6	2	3	5	6	4	—	77
32. Other defined and ill-defined diseases	169	7	16	11	39	136	110	214	702	125	9	8	10	48	159	144	392	895
33. Motor vehicle accidents	—	4	8	24	32	30	10	13	121	—	—	2	3	7	18	9	7	46
34. All other accidents	11	7	10	12	18	38	24	34	154	8	5	2	4	2	13	19	91	144
35. Suicide	—	—	1	6	40	51	22	8	128	—	—	—	1	16	40	21	8	86
36. Homicide and operations of war	—	1	1	—	—	—	1	—	3	—	1	—	—	—	—	—	1	2
All causes	287	45	68	85	403	2,503	2,532	3,344	9,267	235	40	34	37	318	1,545	2,094	4,452	8,755
All causes 1955	334	55	65	79	401	2,333	2,474	3,114	8,855	204	46	46	46	332	1,527	1,956	4,193	8,350

TABLE III — CAUSES OF DEATH BY HEALTH AREAS & COUNTY DISTRICTS, 1956

Health Area and County District	Tuberculosis Respiratory	Tuberculosis other	Syphilitic disease	Acute poliomyelitis	Other infective and parasitic diseases	Malignant neoplasm stomach	Malignant neoplasm lung bronchus	Malignant neoplasm breast	Malignant neoplasm uterus	Other Malignant and Lymphatic neoplasms	Leukaemia Aleukaemia	Diabetes	Vascular lesions of nervous system	Coronary disease angina	Other heart and circulatory diseases	Influenza	Pneumonia	Bronchitis	Other diseases of respiratory system	Ulcer of stomach and duodenum	Gastritis, enteritis and Diarrhoea	Nephritis and nephrosis	Hyperplasia of prostate	Pregnancy, childbirth, abortion	Congenital malformations	Motor vehicle accidents	Suicide	Other diseases* and accidents	All causes
Colchester B.	2	—	1	—	1	21	23	13	4	67	3	7	98	117	211	3	32	29	7	9	3	13	4	1	4	10	9	105	797
Harwich B.	—	—	—	—	—	3	11	5	3	11	1	2	19	20	32	—	9	6	—	3	—	—	—	1	3	1	2	13	145
Brightlingsea U.	—	—	—	—	—	4	—	—	—	5	1	—	13	10	16	1	3	5	—	1	—	2	1	—	1	—	2	12	77
Clacton U.	1	—	—	—	—	10	10	8	3	38	1	3	62	75	89	3	7	7	1	1	3	2	3	1	—	3	1	40	372
Frinton & Walton U.	—	—	—	—	—	3	8	3	—	8	—	1	17	15	30	1	1	7	—	3	—	1	2	—	1	—	—	14	115
Halstead U.	1	—	—	—	—	5	3	1	—	7	1	—	14	12	15	2	5	6	1	2	—	3	—	—	2	—	3	15	98
West Mersea U.	—	—	—	—	—	1	2	—	—	4	—	1	5	14	5	2	—	2	—	2	1	—	—	—	—	—	—	2	41
Wivenhoe U.	—	—	—	—	—	—	1	—	—	2	—	—	9	4	12	1	3	1	—	—	—	—	—	—	—	—	—	7	40
Halstead R.	1	—	—	—	—	5	7	6	1	14	1	4	34	32	56	1	7	9	4	3	1	3	1	—	1	1	3	32	227
Lexden & Winstree R.	—	—	—	—	2	9	10	5	4	25	—	1	46	41	63	2	14	11	3	3	1	3	5	—	3	6	3	50	310
Tendring R.	1	—	1	—	1	13	5	6	2	27	2	2	97	43	97	3	12	21	2	4	—	—	1	—	3	5	4	39	391
1. North-East Essex	6	—	2	—	4	74	80	47	17	208	10	21	414	383	626	19	93	104	18	31	9	27	17	3	18	26	27	329	2,613
Chelmsford B.	1	—	1	—	2	8	13	10	2	30	3	4	52	71	90	1	24	19	4	3	2	2	5	2	6	6	15	53	429
Maldon B.	—	—	—	—	—	5	5	2	—	6	2	1	14	15	30	5	6	4	—	1	—	—	—	—	—	—	—	9	105
Saffron Walden B.	—	—	—	—	—	5	4	3	—	12	1	2	21	7	32	16	7	11	1	3	1	—	3	—	—	1	—	28	158
Braintree & Bocking U.	—	—	—	—	—	5	9	3	1	14	1	—	33	24	32	—	8	6	2	4	1	1	1	—	—	1	3	33	182
Burnham-on-Crouch U.	—	—	—	—	—	1	1	1	—	6	1	—	14	7	8	—	—	1	—	—	—	—	—	—	—	—	—	7	47
Witham U.	2	—	—	—	—	1	1	—	1	9	1	—	12	15	28	2	5	5	1	2	—	1	—	—	2	1	—	13	102
Braintree R.	—	—	1	—	—	6	8	2	2	10	2	—	31	27	73	—	5	19	2	—	1	3	1	1	—	2	3	31	230
Chelmsford R.	4	1	3	—	1	10	14	9	1	46	2	3	71	72	93	2	37	23	3	3	1	5	4	—	5	8	9	69	499
Dunmow R.	—	1	1	—	—	2	8	4	—	21	1	3	33	31	36	1	12	12	—	2	1	1	5	—	1	3	2	28	209
Maldon R.	—	—	—	—	—	4	2	1	1	18	—	—	39	30	67	1	10	13	—	—	3	3	—	—	1	4	1	23	221
Saffron Walden R.	2	—	—	1	1	4	5	3	1	22	1	1	24	24	51	2	6	9	1	3	1	—	1	—	1	3	1	32	200
2. Mid Essex	9	2	6	1	4	51	70	38	9	194	15	14	344	323	540	30	120	122	14	21	11	16	20	3	16	29	34	326	2,382
Basildon U.	6	—	4	—	—	23	19	8	10	60	5	4	83	95	115	2	37	36	5	10	1	4	1	—	4	7	9	68	616
Benfleet U.	3	—	1	—	—	10	6	5	—	26	—	1	42	62	70	1	16	12	3	3	2	2	2	—	2	3	4	23	299
Canvey Island U.	1	—	—	—	2	6	3	2	—	13	1	—	27	28	25	—	4	9	2	1	1	1	2	—	1	1	3	17	150
Rayleigh U.	1	—	—	—	—	3	6	3	—	17	—	—	18	27	27	1	9	12	—	4	—	1	1	—	3	2	2	9	146
Rochford R.	2	—	1	1	—	11	11	6	2	31	1	—	42	59	69	2	16	11	—	6	—	3	2	—	—	2	1	30	309
3. South-East Essex	13	—	6	1	2	53	45	24	12	147	7	5	212	271	306	6	82	80	10	24	4	11	8	—	10	15	19	147	1,520
Brentwood U.	3	1	—	—	1	6	11	9	4	36	2	1	68	79	119	1	35	20	3	6	2	2	2	—	6	4	2	59	482
Hornchurch U.	5	—	1	—	2	34	59	23	14	123	4	13	197	159	326	7	53	95	7	10	4	13	5	1	14	8	9	108	1294
Thurrock U.	12	—	4	—	4	30	34	18	3	87	8	7	70	130	175	2	44	44	9	10	3	10	7	1	11	11	9	91	834
4. South Essex	20	1	5	—	7	70	104	50	21	246	14	21	335	368	620	10	132	159	19	26	9	25	14	2	31	23	20	258	2,610
Chingford B.	2	—	1	—	—	18	26	4	1	29	4	1	55	59	85	—	22	21	4	6	—	2	2	—	2	7	6	35	392
Wanstead & Woodford B.	6	1	2	—	—	17	34	15	7	62	2	5	116	93	171	—	22	45	7	6	2	4	5	—	8	2	9	84	725
Chigwell U.	4	1	1	—	—	11	19	13	3	47	4	7	52	49	63	3	17	23	1	3	3	5	3	—	3	3	5	38	381
Epping U.	—	—	—	—	—	2	2	2	2	10	1	—	16	16	16	—	2	2	—	—	—	1	2	—	1	1	—	6	82
Harlow U.	1	—	—	—	—	3	5	2	1	10	2	1	15	26	20	1	9	8	—	2	—	—	1	—	4	4	2	30	147
Waltham Holy Cross U.	—	—	1	—	—	3	2	2	—	5	—	—	14	13	14	—	3	5	1	1	—	—	—	—	—	4	1	6	75
5. Forest	13	2	5	—	—	54	88	38	14	163	13	14	268	256	369	4	75	104	13	18	5	12	13	—	18	21	23	199	1,802
Epping & Ongar R.	—	—	—	—	1	8	14	7	—	28	2	2	41	46	76	1	19	14	4	1	—	3	4	—	3	2	4	33	313
6. Romford B.	6	2	2	2	1	27	42	12	6	78	10	2	73	110	122	2	34	41	4	5	8	12	3	1	9	6	12	90	722
7. Barking B.	8	1	3	1	2	14	40	12	6	74	3	3	71	102	96	3	29	43	14	10	4	3	2	—	6	7	10	81	648
8. Dagenham B.	12	1	3	—	1	30	57	12	7	75	10	9	81	127	136	2	35	71	11	9	6	12	6	—	18	10	19	75	835
9. Ilford B.	19	2	5	—	6	50	87	43	12	174	7	16	305	331	500	7	94	120	29	36	6	8	10	2	21	14	20	162	2,086
10. Leyton B.	15	1	7	1	1	30	65	23	9	119	8	8	172	154	304	4	85	107	9	20	6	6	7	—	8	7	15	105	1,296
11. Walthamstow B.	5	3	5	—	1	31	63	32	6	125	7	11	144	182	235	9	70	86	11	20	4	9	6	1	6	7	11	105	1,195
Administrative County	126	15	49	6	30	492	755	338	119	1,631	106	126	2,460	2,653	3,929	97	868	1,051	156	221	72	144	110	12	164	167	214	1,911	18,022
Administrative County 1955	140	29	56	20	35	493	653	323	132	1,616	109	110	2,274	2,506	3,770	80	883	893	168	229	81	151	131	11	148	167	170	1,827	17,205

* Including — Meningococcal Infections 7. Whooping Cough 3. Smallpox Nil. Diphtheria Nil. Measles Nil. Other Accidents 298. Homicide & War 5.

TABLE IV — NOTIFICATIONS OF INFECTIOUS DISEASE, 1956

Health Area and County District	Scarlet fever	Whooping cough	Measles	Acute pneumonia	Tuberculosis respiratory	Tuberculosis meninges and C.N.S.	Tuberculosis other	Meningococcal infection	Acute poliomyelitis (paralytic)	Acute poliomyelitis (Non-paralytic)	Dysentery	Ophthalmia neonatorum	Puerperal pyrexia	Para-typhoid fevers	Erysipelas	Food poisoning	Infective hepatitis	Others †	Total
Colchester B.	31	189	14	35	15	—	4	3	2	—	62	—	28	1	3	14	13	2	416
Harwich B.	—	45	9	2	7	—	1	1	—	—	1	—	1	—	1	—	2	—	70
Brightlingsea U.	3	1	—	—	1	—	1	—	1	—	—	—	—	—	—	—	—	—	7
Clacton U.	2	20	141	—	8	—	4	—	2	—	—	—	1	1	—	—	—	—	179
Frinton & Walton U.	22	8	51	1	—	—	—	—	2	—	—	—	—	—	1	6	—	—	91
Halstead U.	—	—	208	—	1	—	1	—	—	—	15	—	—	—	—	—	3	—	228
West Mersea U.	—	—	1	1	—	—	1	—	—	—	1	—	—	—	—	—	—	—	4
Wivenhoe U.	—	4	61	1	1	—	—	—	—	—	1	—	—	—	—	—	—	—	68
Halstead R.	1	7	318	1	10	—	2	—	—	—	1	—	—	—	1	—	5	—	346
Lexden & Winstree R.	17	37	10	18	6	—	6	—	—	—	6	—	—	—	6	—	1	—	107
Tendring R.	16	34	43	3	1	—	3	1	—	—	10	—	—	—	4	2	11	—	128
1. North-East Essex	92	345	856	62	50	—	23	5	7	—	97	—	30	2	16	22	35	2	1,644
Chelmsford B.	12	57	667	15	13	1	—	—	—	—	5	—	22	—	4	1	5	—	802
Maldon B.	1	1	7	14	4	—	—	—	—	1	—	—	4	—	—	2	—	—	34
Saffron Walden B.	4	1	1	—	3	—	—	—	—	—	—	—	—	—	4	—	—	1	14
Braintree & Bocking U.	2	12	16	1	9	—	—	—	—	—	1	1	—	—	1	2	—	—	45
Burnham-on-Crouch U.	—	—	—	3	2	—	—	—	—	—	—	—	—	—	2	1	—	—	8
Witham U.	1	104	3	8	6	—	—	—	1	—	1	—	—	—	2	—	—	—	126
Braintree R.	6	82	86	3	4	—	1	—	—	—	1	—	7	—	4	3	—	—	197
Chelmsford R.	16	89	160	15	21	—	1	—	—	—	11	—	3	—	2	50	—	—	368
Dunmow R.	6	25	42	11	6	—	2	—	—	1	8	—	1	—	1	2	—	—	105
Maldon R.	5	79	17	10	5	—	1	—	1	—	—	—	2	—	1	5	6	—	132
Saffron Walden R.	2	123	10	21	5	1	1	—	1	4	—	—	—	—	1	—	3	2	174
2. Mid Essex	55	573	1,009	101	78	2	6	—	3	6	27	1	39	—	22	66	14	3	2,005
Basildon U.	46	310	518	18	34	—	4	4	4	4	130	—	18	1	5	22	—	—	1,118
Benfleet U.	14	96	154	9	15	—	2	—	—	—	—	—	2	—	2	4	1	1	300
Canvey Island U.	7	42	235	14	7	1	1	—	—	—	—	—	—	—	—	—	—	—	307
Raylcigh U.	3	5	2	1	2	—	—	—	—	—	1	—	—	—	—	—	—	—	14
Rochford R.	30	16	7	1	4	1	1	1	1	—	—	1	92	—	2	2	4	—	163
3. South-East Essex	100	469	916	43	62	2	8	5	5	4	131	1	112	1	9	28	5	1	1,902
Brentwood U.	16	150	30	27	18	—	2	2	1	1	12	—	4	—	1	6	—	—	270
Hornchurch U.	167	298	630	18	59	—	5	1	8	5	34	2	—	2	18	23	33	1	1,304
Thurrock U.	47	591	408	68	77	—	13	1	4	7	137	1	13	2	9	161	—	4	1,543
4. South Essex	230	1,039	1,068	113	154	—	20	4	13	13	183	3	17	4	28	190	33	5	3,117
Chingford B.	65	249	59	17	20	—	2	2	—	1	23	—	1	1	5	4	*	1	450
Wanstead & Woodford B.	25	57	154	15	30	—	—	—	1	1	38	—	24	1	5	36	*	2	389
Chigwell U.	45	249	55	17	39	—	4	1	3	—	129	1	1	5	4	4	*	—	557
Epping U.	—	28	7	—	5	—	2	—	—	—	3	—	1	—	—	—	*	—	46
Harlow U.	9	75	343	1	10	1	2	1	1	1	107	—	2	—	1	11	8	—	573
Waltham Holy Cross U.	1	33	59	6	4	—	—	—	—	—	25	—	—	—	1	—	*	—	129
5. Forest	145	691	677	56	108	1	10	4	5	3	325	1	29	7	16	55	8	3	2,144
Epping & Ongar R.	9	84	45	10	3	—	2	—	1	1	41	—	—	—	6	8	4	1	215
6. Romford B.	139	368	743	37	62	—	1	4	3	6	48	—	3	7	8	50	*	—	1,479
7. Barking B.	49	110	27	33	46	1	4	2	—	—	152	14	52	1	8	21	*	6	526
8. Dagenham B.	86	412	91	48	75	—	2	3	4	9	67	8	3	6	15	46	*	1	876
9. Ilford B.	191	394	502	159	126	1	13	4	4	2	161	7	73	6	30	51	*	12	1,736
10. Leyton B.	58	163	831	141	50	1	1	5	2	1	49	1	12	14	15	46	*	1	1,391
11. Walthamstow B.	111	345	476	65	71	1	5	1	3	—	33	4	81	5	28	24	*	1	1,254
Administrative County	1,265	4,993	7,241	868	885	9	95	37	50	45	1,314	40	451	53	201	607	99	36	18,289
Administrative County 1955	1,238	2,163	27,777	1,045	893	13	144	35	251	200	251	18	454	34	231	466	198	55	35,466

* Infective Hepatitis is not notifiable in these Districts, thus the County Figure of 99 is incomplete.

† Including Malaria 6, Acute Encephalitis, Infective 6, Post Infectious 2, Enteric or Typhoid Fever 4, Diphtheria 2, and Smallpox Nil.

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District Control—Hospital Car Service

During the year a scheme was introduced whereby a small number of cars provided by the Hospital Car Service were attached to an ambulance station and came under the direct operational control of the Station Officer.

The area chosen for this experiment is of particular interest because it consists of a fairly large area bounded by the River Crouch and the sea. It is divided by numerous inland waterways and there are some miles of unmade roads with a number of isolated dwellings and is the patient catchment area of the Southend and Rochford General Hospitals.

The Thundersley Ambulance Station, with a vehicle establishment of two ambulances and two six-seater sitting case vehicles, upon which the scheme is based is some eight miles from the two hospitals. Five cars working on a part-time basis are attached to the Station for operational duties. The object of the scheme is for patients living in inaccessible localities to be conveyed by the cars whilst patients living in more urban areas are conveyed in parties in the sitting-case vehicles leaving the ambulances to carry out their proper function of conveying stretcher patients. This combination of the Hospital Car Service and the directly provided service working under the direct supervision of a Station Officer in a broadly defined patient catchment area with clearly designated hospitals, may well set a pattern for the future.

During one month in the year the number of patients conveyed by these cars was 914 with an average mileage per patient of 7.8 ; the two sitting case vehicles conveyed 776 patients on an average mileage of 4.82 per patient and the two ambulances conveyed 460 patients on an average of 12.7 miles per patient.

Statistics

During the year 48,479 emergency cases were conveyed by the service, compared to 48,368 in 1955. These cases included accidents, maternity cases and illnesses necessitating urgent removal to hospital. The table below analyses these cases according to their nature, accidents being sub-divided to show the location of the accident :—

Nature of Emergency	*Patients Conveyed*		*Patients Conveyed 1956 as percentage of all Emergency Cases*
	1955	1956	
Street Accident	5,589	5,352	11.0
Home accident	3,611	3,401	7.0
Industrial Accident	1,347	1,261	2.6
Other Accidents	2,451	2,363	4.9
Total Accidents	13,098	12,377	25.5
Maternity	8,791	9,034	18.6
Urgent Illness	20,308	21,132	43.6
Other Emergencies	6,171	5,936	12.3
Total Emergencies	48,368	48,479	100.0

There was a marked decrease in the number of accidents of all types during the year, the most noticeable being street accidents with a drop of 337 cases. For the first five months of the year, street accidents increased but from then onwards cases of this nature assumed a downward trend.

The Hospital Car Service continued to play an important part in the conveyance of non-emergency cases, the number of patients carried being 43,783 compared with 34,550 in 1955. Mileage showed a corresponding increase being 729,435 and 627,587 respectively in the two years. The average mileage per patient was 16.7 compared to 18.2 in the previous year.

Of the non-emergency cases conveyed, 89 per cent were taken to or from clinics and out-patient departments and, as in the previous year, nearly 50 per cent of these were carried to physiotherapy clinics. Discharges numbered 16,585 (3.2%), admissions 21,099 (3.9%) and inter-hospital transfers 14,624 (2.7%).

The decrease in miles per patient during the last five years is shown in the following table :—

Year	*Patients*	*Mileage*	*Miles per patient*
1952	466,750	3,803,322	8.14
1953	491,472	3,860,558	7.85
1954	594,166	4,308,453	7.25
1955	628,612	4,341,334	6.91
1956	632,775	4,337,453	6.85

Operational Statistics

Comparable figures to those given in 1955 and relating to the service to the public are given below :—

	Ambulance Service	*Hospital Car Service*	*Total*
Total mileage	3,608,018	729,435	4,337,453
Number of patients conveyed	588,992	43,783	632,775
Mileage per patient	6.12	16.66	6.85
Number of emergency cases	48,479	—	48,479

Cost of the Service

The statistics provided below show the growth of the Service as a whole and the increase in operational commitments and costs for the last five years,